AMERICAN BEE JOURNAL

The Oldest Bee Journal in the English Language

ESTABLISHED BY SAMUEL WAGNER IN 1861

Copyright 1938. Published monthly at Hamilton, Illinois. Entered as Second Class Matter at the Postoffice at Hamilton, Illinois. G. H. Cale, Frank C. Pellett, M. G. Dadant, Editors; James C. Dadant, Circulation Manager. In United States, Canada, and Mexico $1.00 a year; two years $1.50; three years $2.00. Foreign $1.25 a year; two years $2.00; three years $2.75. Subscription stopped at expiration printed on wrapper.

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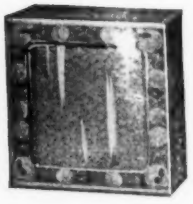

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American Bee Journal

Vol. LXXVIII—No. 12 Hamilton, Illinois, December, 1938 Monthly, $1.00 a year

Winter Comes Again

WITH December comes the close of another year. Once again it is time to balance accounts and take note of our situation. Winter brings a period of rest to the bees and their owners in anticipation of another busy season just ahead.

1938 has brought the usual variety of success and failure, of encouragement and disappointment, of profit and loss. On the whole, the beekeepers of the nation appear to have fared as well as their neighbors, and in many cases better. There is increased interest in the use of honey in many quarters and a far greater appreciation of the services of the bees in the pollination of crops. The public is consuming more honey and the farmers demand the presence of more bees to fertilize the flowers from which their fruitage must come. The beekeeper's standing in the community is going higher each year and prospects ahead are promising.

—ABJ—

Deficient Subsoil Moisture

IN some midwestern areas there has been serious crop loss this season, even with normal rainfall. Due to the long continued series of dry seasons the subsoil moisture has been greatly reduced. When the dry period of summer came the crops suffered for lack of moisture which normally would be present in the soil in the form of reserve. It will require several years of ample rainfall to replace this subsoil moisture on which crops must depend in the periods between rains.

—ABJ—

An Unseasonable Autumn

REPORTS are to the effect that temperatures ranged higher with more clear days during the autumn this year than at any time in history. The weather has been very fine for physical comfort but not so good otherwise. Temperatures ranged high and remained at midsummer levels for days at a time throughout the plains region and the upper Mississippi Valley.

As a result of this unusually warm weather the bees have remained active at a time when they are usually quiet. They have consumed stores heavily when usually little is used. Colonies that were in good condition for winter at the end of September required feeding at the close of October.

In many cases where the bees were well prepared for winter at

A list of dealers in bee supplies, honey packing equipment, package bees, nuclei, and queens is compiled once a year by the Bee Culture laboratory of the Bureau of Entomology and Plant Quarantine, United States Department of Agriculture. This list is sent to correspondents who wish to purchase bee supplies, etc. The list is now being revised and those who desire to be listed again, or who wish to be entered for the first time, should send the following information to the Bee Culture Laboratory, National Agricultural Research Center, Beltsville, Maryland:

1. Name and address.
2. Dealer in: (1) Bees and queens (state race). (2) Package bees (state type and race). (3) Bee supplies. (4) Honey packing equipment.

The list will be closed to entries January 15, 1939.

♦

Two weeks before our "it can't happen here" hurricane, my mother had a shock up in the New Hampshire mountains. While I was up there with her, we had the big breeze in Rhode Island. Those were frantic days.

Our farm suffered very little, comparatively, and my wife and four youngsters were unhurt. We lost a shed, some shingles, a few trees, and a horse. Our hives were tipped over, and Mrs. Lippitt and the small fry rushed in without protection to save what they could. The bees couldn't reach them to sting intentionally, but when a bee was spattered on bare faces and arms, the sore bee had no choice but sting. Very little damage to bees or equipment. We are 50 feet above the bay and a mile from it, so the waves didn't trouble us.

There is nothing like a good breeze to put respect for God into a fellow's stomach. And that respect, coupled with a reasonable contempt for man and his works is a healthy feeling to have. I could name a few dictators I feel are deficient in this matter.

Gorton Lippitt,
Rhode Island.

Scarcely an issue of the bee journals appear in which some one does not take a rap at cane sugar, his idea being to promote the use of honey. There is an old rule, recognized by salesmen everywhere, to the effect that knocking your competitors product does not advance your own. Many things may have changed in these last few years, but that rule has not changed. Knocking another product is negative salesmanship, which means that it is no salesmanship at all. To apply it to sugar or any other product is entirely a waste of effort. The only way to sell honey is by positive selling methods.

Walter H. Hull.
North Carolina.

♦

I have noticed in recent issues, that your quoted prices on honey for Manitoba are not correct. In the last issue it says "Offers, etc., at 7-7½."

There are hardly any offers in the market, and what honey is being sold in Winnipeg is bringing 6 cents. The second figure "C/L White extracted 8½-9 cents" is also out of line.

Some honey has sold at 6½ and 7, but none I think as high as 8½. These prices are, of course, with 10-pound pails as the basis, ½ cent higher for 5-pound pails and 1 cent higher for 2½-pound cans. The cans are gross weight also, which makes comparisons with prices in the States difficult.

Some beekeepers are holding honey at 7 cents in 10's as a basis and I think that when prices get there, later in the winter, there will be plenty of honey to offer. Manitoba this year has a large crop and so apparently have the other provinces. The most hopeful factor in the case is the absence of a carryover from last year. We started out with a clear market, and as soon as cold weather comes, I think the congestion will disappear.

Hy. W. Sanders,
Manitoba.

♦

Pollen is being outmoded by stimulating chemicals, which, when sprayed on flowers, fertilize them. Tomato blossoms, freed of all pollen, develop full sized fruits when their ovaries are treated with indole-acetic acid. Female holly, flowers untouched by pollen, produce prize berries after being sprayed with water carrying naphthalene-acetic acid. However, the chemicals failed with self-sterile Starking apples, because their flower styles were too long.

(This is a clipping sent by Alfred H. Pering, Florida.)

the close of the honeyflow the coming of cold weather finds them with insufficient stores unless feed is given them. Every beekeeper will do well to make sure that his bees are properly provisioned if he has not investigated recently.

Another effect of the unusual weather is likely to be the loss of many bees which would otherwise have lived over to start the next season. Warm and balmy weather tempts the bees to go afield even though no forage is to be found.

In most cases brood rearing continued later than usual and had cold weather come at the normal time, clusters would have been large. The benefit of this late brood rearing is likely to be largely dissipated by abnormally warm weather late in the season.

———ABJ———

Death from Stings

WITHIN the recent past two cases of death from bee stings have been brought to the attention of this office. Such unfortunate incidents are rare but they happen just often enough to keep the public nervous about bees. The average person is very much afraid of bees and wasps and some people fear nearly all insects. This nervousness seems foolish to the beekeeper who is familiar with their habits but there is very little that can be done about it.

While in many cases newspaper reports are grossly exaggerated it does sometimes happen that one who is especially susceptible to bee sting poison receives a fatal shock.

It appears probable that there are more persons who are able to report beneficial results from stings than are affected adversely. This fact does but little to allay the fears of the rank and file of the public.

Beekeepers should always use the greatest care to avoid disturbing the public. Hives should be placed away from passing traffic and watering places should be provided to keep bees from lily pools, stock tanks and other open water where their presence is unwelcome.

In dealing with the public "an ounce of prevention is worth a pound of cure." It is difficult to overcome a prejudice that develops as the result of an unfortunate incident. Every precaution should be taken to avoid them.

———ABJ———

Market Problems

ONE need not look very far to be impressed by the need for a more efficient system for marketing the honey of American beekeepers. The drop in price which came with this year's slight increase in production was entirely out of line with the available supply of honey.

Poultrymen, dairymen or grain growers have a market with daily quotations for their produce in line with the supply. The individual producer, unlike the individual beekeeper, is not under the necessity of finding the ultimate consumer.

The tendency of the times is for the goverment to undertake the

solution of everybody's problems. It would seem that the thing most needed by the beekeeper is a solution of the problem of markets, yet nobody seems to be doing anything about it. Some central agency must be established before there is any stability in the honey market. The increase in the number of honey packers leads to the hope that not many more years will pass before some system of distribution of the honey crop similar to that of butter or eggs will be within the beeman's reach.

—ABJ—

Changes in Convention Programs

THERE appears to be a very general trend back to the former plan of more discussion and less dependence upon so many lectures at this season's conventions. Formerly much time was given to discussion of every paper. Of late discussion has been more and more curtailed until it has been almost entirely discontinued at some bee meetings.

Properly controlled discussion adds much to the interest of any meeting and is likely to stimulate attendance. However, an adroit chairman is sometimes needed to keep discussion within proper bounds and prevent a few men from taking up too much time with trifling comment.

—ABJ—

Bees in the Schools

THE Des Moines Sunday Tribune for October 30, shows pictures of school children with observation hive, also visiting the apiary of a local beekeeper. The number of similar reports coming to us indicate that bees are receiving far more attention on the part of school teachers than was the case in days gone by.

Every beekeeper who sells his honey locally will do well to provide the local teacher with an observation hive to permit the children to become acquainted with the habits of these useful insects. When the children visit an apiary as in the case shown in the Sunday paper, there is usually developed an interest in the product of the hives and an insistent demand on the part of young members of numerous families for honey on the table.

In view of the very important service which the honeybees play in pollination, it would seem that they are worthy of more attention in every agricultural course than they usually receive. Perhaps if our beekeeping specialists would contact the teachers, they might find a ready response and an eager use of educational material which would make it easy to present the subject to younger students.

—ABJ—

Appreciation

THE staff of this magazine wishes to express appreciation for the generous support of our readers during the past year and solicit your continued indulgence for the months ahead. We like to receive suggestions as to what should appear in the magazine and to know which articles you like best. It is from your letters that we try to determine the kind of publication that meets our readers' needs.

Cyanogas is light and rises rapidly throughout combs when used for fumigation purposes; or when it is used at the entrance of colonies in killing bees. But it is not a safe chemical. I worked several years ago with a professional renovator and some of his experiences should be interesting. He always carried a $1000 bond in case any pet dog, cat or careless person was overcome or killed with the gas. He, himself, had been overcome even when wearing a gas mask, as the gas gradually enters the blood through the pores of the skin. More than once he called to his assistants, "Get me out! I'm going!" So they carried him out by the heels, reviving him by artificial respiration. We know of other experiences with this gas—treat it like a rattlesnake.

Frederick Garman,
Pennsylvania.

[We have recently learned of the death of a young beekeeper at Greenville, Ohio, who was found following an attempt to fumigate supers piled in the loft of a barn. Missing him at the house, his father began looking for him and found him dead. He had been using cyanogas without any mask or other protection. This is the first loss of this kind of which we have heard.—Editor.]

♦

Bees swarm on "tapang" (**Koompassia**) trees and the Dayaks collect the honey at night. All "tapang" trees are owned by somebody and anyone, seeing a swarm settle on a tree, immediately drives a stake into the ground to claim discovery and then goes to inform the owner of the tree. When the honey is ready the man who first discovered the swarm, the owner of the tree, and a few friends, go out at night, the owner scaling the tree with a smouldering piece of firewood in one hand, ascending by means of pegs knocked into the tree. The smouldering wood is banged against the tree trunk and the bees seeing the sparks leave the tree to follow them to the ground. The honey is collected, the owner descends and the bees later arise again. Before going to collect the honey fish must not be eaten that evening by any of the party lest the bees follow the smell of fish and not the sparks.

A. C. Burrill,
Missouri.

(From Sarawak Museum Journal, July, 1937, page 381—"Honey" by E. H. Elam.)

♦

According to a newspaper clipping, Saskatchewan honey for export this fall will put about $250,000 in the pockets of beekeepers in that province. Last year, it was only $100,000. The yield this year is better than average. There are 4,032 registered beekeepers, an increase of 132 over 1937. Last year, Saskatchewan honey commanded a premium of 15 cents in England.

An American Beekeeper in Germany

By Sylvia Dresbach,

Germany.

I am an American woman living in Germany and for four years I have been using American methods of keeping bees. I imported my equipment and I am probably one of the few, if not the only American beekeeper, in Germany.

I started beekeeping as a hobby with two German Gerstung hives six years ago. I had no previous experience or knowledge about bees, but I labored diligently through all the books I could find, seeking information for my adventure.

Finally, a good German beekeeper asked me why I spent my energy learning through German sources, when America, my own country, was so rich in bee literature. This was news to me since my occupation before I left the States, was far removed from beekeeping. I lost no time in getting books nor did I neglect to subscribe for the bee magazines.

Fortunately, I became indirectly acquainted with Dr. Phillips who advised me strongly to use American methods. I began work with real joy after I received my equipment. I struggled along, falling into all the pitfalls attending the inexperienced beekeeper and scrambling out again. Even so, I soon became convinced that I was on the right track.

From my Gerstung hives, I had many swarms. The swarming was certainly not all the fault of the hive but was largely my poor manipulation; and the fact that I had made increase by hiving swarms sent to me from the heather region. The bees from that region are great swarmers and the more they swarm, the better they please the heather beekeeper.

From an original six colonies, I had thirty-eight swarms the following season. With all the courage of "an angel rushing in," I managed to catch all of them. They came out so thick and fast in my neighbor's garden, that I threw them three and four fold into Langstroth hives, with foundation as the only attraction for keeping them there. Nevertheless, they made themselves at home and built up nicely by fall. I requeened them with Italian stock, fed them

The Dresbach apiary is entrenched in shady woods and made beautiful to give comfort to the owner. The lower picture shows a neat watering device. Bees like to get water nearby when they can sit and sip. They dislike running water.

well and packed them in groups of four for winter. Since then, 1933, I have had no swarming with the exception of the one swarm which surprised me by coming out late in August of last summer.

I pack my bees with moss, gathered, while dry, from the extensive pine forests which prevail in this locality. During five winters of use, I have not lost a single colony through poor wintering. When I unpack the colonies in May, I find them as dry and free from mold as they were when I packed them in September. Where one has access to such material, it is ideal for winter and may be used again and again.

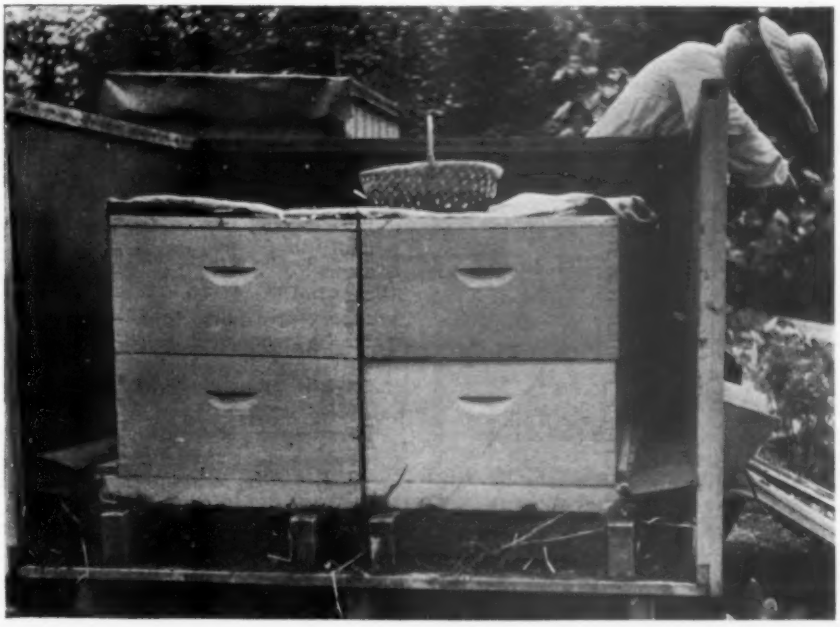
Our bee pasture is considered poor but I have not found that to be the case for my own bees. For early honey, there is an abundance of willow, fruit, black locust and lime, although the latter seldom yields much nectar. Later are meadows with clover within a radius of several miles.

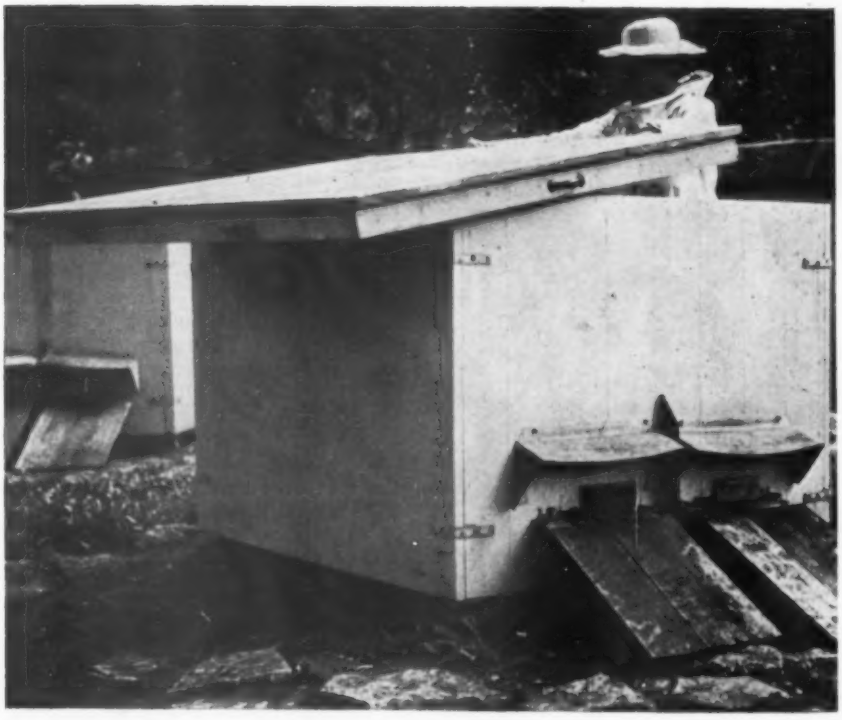
In 1934 I received permission from the Government to import queens and I had twenty-four yellow banded queens from the United States brought over in August. With these I succeeded, perhaps more through luck than wisdom, in requeening my bees. I kept most of these queens through the second year and the stock is still good.

By practicing swarm prevention and keeping colonies strong for early spring, I have been able to reap a good harvest even in poor seasons. I leave much honey for winter stores, something rarely done in Germany.

An amusing incident occurred last year. An elderly man, a farmer beekeeper, stopped at my place one day while I was working to ask about my bees. What kind of hives I used and how I took care of them. After looking at my colonies standing four bodies high, he remarked, "There is no honey to be gotten in this locality." I quietly asked him what he thought I had in the hives. "Well," he said, "It can't be good honey and you will not be able to sell it." I replied that it was very fine honey and sold too readily. And when I further stated I also left fifty pounds in each for winter, he simply, remarked, "Nonsense" and walked away, in nowise convinced.

However, the average German doesn't need to be convinced of the food or medicinal value of honey. The Germans are certainly honey minded. They are critical as to its flavor and are averse to having it heated although they do not mind when it is crystallized. I am never able to meet the demand for honey which I sell right from my house. Orders for next season already exceed my probable harvest. Reckoned in dollars, I receive about 37½ cents





Long orthodox American packing, the quadruple case, with heavy insulation, two-story colonies, with heavy combs of honey above. Here Mrs. Dresbach uses moss for packing.

Heavy to handle but there is a certain feeling of security in the job when it is done. And the cases last for years.

per pound for the honey itself not including the container.

For two seasons I have used the Snelgrove method of swarm control which has proved successful and easy in requeening, as well as a method for raising a few extra queens to help out my friends who keep bees in the neighborhood.

This method, devised by L. E. Snelgrove of England, is practically a two-queen colony idea. However, the bees do not have direct access to both parts of the colony, so I have about concluded there is too much division of labor for the field bees.

It is not always possible to send them below and keep the young bees above. The two queens are divided by a screen board and the field bees are supposed to be tricked into going below to the supers by manipulations of openings into the hive. I have found they soon learn where and how they wish to go and where they wish to remain.

The distribution of bees is too variable. I mean to use these screen boards again but I shall try covering the opening with a queen excluder instead of wire screen. The queen excluder will give all the bees direct access to both brood chambers and to the supers, whether they enter by the upper opening or the one below. [Much like our two-queen system now being used in this country.—Editor]

This method builds up enormous colonies. Provided there is a good honeyflow, there will be a crop. The honeyflow here is long and drawn out, never over exciting, but extending from spring until late fall when there is plenty of goldenrod and aster. Because of this constant pasturage, one can usually keep large colonies constantly. I sometimes wonder if I am not too indulgent with my bees and that they are cheating me a bit by using too much of the good honey themselves.

I will be glad to hear from beekeepers in the States who, when they read this, may have suggestions to make.

———ABJ———

Apis Dorsata Raids Camel Drivers

A clipping sent by Alfred H. Pering, of Florida, tells how six camel drivers in India were stung to death by a swarm of bees in Suratnagar. According to the only survivor, a halt had been made near the jungle and the caravan was attacked by the bees after the men had lighted a fire to cook their food. The victims ran in all directions but were stung to death in a few minutes. Two of the camels perished also.

Winter and Spring Fight It Out

By J. D. Marsh,
California.

THIS picture was taken at an elevation of 4000 feet in the Sierras of north California in the edge of the heavy winter snow belt, which creates not only a snow problem, but a bee problem. Three years ago we drove a car to town every day all winter. Two years ago the heavy snows came the 28th of December and the roads were closed until April. Last winter, three weeks before the picture was taken, the 28th of January, we were picking wild flowers and the bees were gathering honey and pollen from alder with manzanita just beginning to bloom.

I had just begun to wonder whether it would be advisable to take the winter packing out of the supers and put in combs when it began to snow and continued to do so for eighteen days. On the morning of January 19th, there was seven and a half feet of snow on the level and no signs of the hives. Since I had no previous experience with heavy snow, I had always kept the hives shoveled out for fear they would suffocate. In this instance, I decided to let two hives go as an experiment. And when they were shoveled out at noon on the 20th, they were in excellent shape with but few dead bees and but few carried out the following day.

There was a cavity of about six inches melted all around the hive, except on the division board side. There was no vent at the surface of the snow so the snow must be porous enough to allow the necessary ventilation.

Although we have heavy snows, it seldom gets very cold or below 12 or 15 degrees above zero and so the only packing used is a super of maple leaves with a single burlap between the hive body and the super.

I use the Modified Dadant hives leaving a body of honey undisturbed for winter feed and seldom lose a colony while an old beeman further down the mountain, lost all his colonies in standard 8-frame hives and had to start with package bees in the spring.

It was odd to see the bees come tearing in loaded with pollen and honey with four or five feet of snow all around the hives. We live on the side of a steep canyon, the bottom of which is generally below the snow line and higher up this canyon, above the house, there is snow long before there is any near the house.

Bees may start on manzanita in the bottom of the canyon and in five or six weeks be working on manzanita at the top. Although I am sorry to say that manzanita freezes out about every other year.

With the exception of the spring honeyflow, the honey is dark and heavy but we have no trouble in disposing of it locally as the mountain people prefer it to other kinds because it has a flavor all its own.

Did you ever see a dog as a necessary part of apiary equipment? We not only live on the side of a canyon, but the country is a little wild so it is not uncommon to awake in the morning and find bear tracks within a hundred feet of the colonies, since Mister Bear is not only fond of honey but of bee brood. Yet he can easily be discouraged by the bark of a dog which he probably associates with his enemy, man.

Skunks give a little trouble but are easily trapped. Bee martins are extremely destructive at times, but a 22 rifle has about accounted for them, over one hundred last year. Of all the pests, the large red ant that lives in great colonies under trees and bushes is the worst. If there are any of these nests within fifty yards of a hive, the only remedy for them is prompt and complete extermination which is not as easy as it sounds because the moment you disturb a nest in earnest, all those not engaged in fighting will seize larvae and start for parts unknown. So soon you have

twenty or more nests which will become as populous as the original one.

The best way, when they attack a hive, is to use the spray gun and fly spray. By working carefully, few bees will be hurt but the ants seem to fear the stuff and leave their nest. Then, by disturbing the nest thoroughly a couple times each day, spraying them thoroughly, they soon move. If they move away from the hive, let them go. If they move toward the hive, spray them and they will soon learn they are not wanted and bother no more. Fire would be effective, too, but we live where fires are taboo.

We have been expecting American foulbrood as a few years back wild bees were numerous, but were practically exterminated by foulbrood. I have been baiting for wild bees each fall but have found few. Those that I do find are Italians. The black bee is gone.

—ABJ—

Our Cover Picture

The picture this month is furnished by Brother Frederick, who is the beekeeper of St. Mary's Mission House, at Techny, Illinois. It is a typical winter scene which we all enjoy.

For 1939, pictures for the cover, beginning in the January issue, will be entirely different. Each cover will show a typical farm scene or some agricultural project in the pursuance of which the bee is an important factor for pollination purposes.

The relation of the honeybee to the farm program is becoming more and more evident to the farmer each year, and a series of pictures on this subject with short accounts inside for each issue should be of great interest to beekeepers and their farmer or horticultural friends. If you have any photos which will be illustrative of this theme, we will be very glad to have a chance to see them.

—ABJ—

Nebraska

Colonies going into winter with bee power good. Honey crop: one third, some surplus; one third, enough for winter; and one third, light. It will take all of the surplus and more too for winter stores. I have a number of queens I hope to winter.

J. Howard Wagner,
Nebraska.

Michigan

We have had such unseasonable warm weather through October and to date that the lilac bush is in bloom and I saw a bee on the flowers October 28 while eating my dinner. The bloom is still on November 7 and I thought this ought to be news.

W. C. Greenleaf,
Michigan.

—ABJ—

Hamilton & Company To New Los Angeles Location

Hamilton & Company, agents for the California Honey Company, have announced that they are moving from their present offices to a new warehouse location about the first of December.

For nearly thirty years, Mr. Roth Hamilton and his firm have maintained offices in the Central Building in Los Angeles. The expansion in the activities of the company now requires a change, however, and new offices will be opened in conjunction with a large private warehouse of approximately 16,000 square feet of floor space.

The new address is to be 1360 Produce Street, Los Angeles, California.

Facilities will be provided for storing the producers' honey and beeswax until such time as they are ready to dispose of it. It is expected that a large number of beekeepers will avail themselves of this service in the spring of 1939.

Invitations are cordially extended to the entire beekeeping fraternity to inspect the new location.

—ABJ—

Insulite for Winter

I have six colonies packed outside, one with 1 inch Insulite. They have wintered well in this when the temperature was 36 degrees below zero.

John O. Bergstrom,
Minnesota.

—ABJ—

Cheap Cellar Wintering

By Lynn M. Aldrich,
Michigan.

IN the fall of 1936 I partitioned off a part of a root cellar for bees and put in two ventilating flues. Two colonies in the cellar wintered 100%. The root cellar was dug into a sand hill with a slush scraper and team. Charred poles were put across the top and covered with straw and sand. The walls of the cellar were not lined.

In a climate like the Upper Peninsula of Michigan cellar wintering is the only practical way. I have tried various methods of outdoor wintering with variable results.

In the fall of 1937, I put fourteen colonies in the cellar. In the spring two had died of starvation and one was queenless.

The picture was taken February 4, 1938, showing the front of the cellar dug out of the snow. In the background the flue may be seen and the other flue is in the foreground, almost hidden by the snow.

For a beekeeper living in the far North, with a small apiary and limited capital, I believe a cellar like

this is needed. It may be improved and made more permanent.

The other picture shows the apiary in 1937.

INSTITUTE NEWS

May you all have a Merry Christmas and a Happy New Year!

* * *

The 4H Club Cookie Contest has been judged and the following have received awards.

1. Jean H. Lee, Route 4, Janesville, Wis. 2. Evelyn M. Chapin, Route 1, Cambridge, N. Y. 3. Shirley Fuller, Marengo, Wis. 4. Maxine Fuller, Marengo, Wis. 5. Jeannette V. Johnson, Route 1, Clintonville, Wis. 6. Ruth Davis, Box 128, Anaheim, Calif. 7. Marjorie Finner, Dodge, Wis. 8. Alice Greer, Sharon, Miss.

* * *

A typographical error in a recipe for Cranberry Honey Pudding with sauce appears in the copy of Institute Inklings that has just gone out. Instead of two tablespoons of soda, it should read "two tablespoons of flour."

* * *

Have you seen the honey story in the Kansas Farmer for November 5, 1938, the Honey Pumpkin Pie in the November issue of McCall's, and the two-page story on Honey and its Food Value in Phoenix Flame?

* * *

If you haven't read "The Story of Ferdinand," do read it and have a good laugh. It is so good that it will soon appear in the Walt Disney series. Walt Disney departs from his usual technique by having a narrator speak the Munro Leaf text throughout with only a scattering of lines among the "players." This is said to be one of the best Disney shorts.

* * *

Home Economic students at Woodbury College in Los Angeles have chosen sugar and honey for their project this year.

* * *

The girls in the Home Economics Department of the Manual Training High School at Indianapolis are putting on an exhibit of sugar and Honey in the main hall of the school. There are about 600 girls in that Department.

* * *

Miss Margaret Sawyer, Director of Consumer Service Division, of the Glass Kitchen writes that one of the projects now underway in the Glass Kitchen is the development of recipes using honey.

The More We Learn The Less We Know

Howdy, folks! This is station WV, the famous Willamette Valley where (we are told) rains never cease, the sun never shines, clouds hang just above the chimney and the native Oregonians are so accustomed to water that they have moss on their backs and webs between their toes! Believe it or not, every part of the country has had rain this year but us. The weather bureau records but .85 of an inch in three consecutive months—the driest since 1904 when the same three months got but .75 of an inch.

Those webs are getting so dry they're cracking, and if we try to find a stream to wet them we find that some farmer has taken most of the water to irrigate his potatoes or clover. The fish were actually having difficulty getting enough water to wet their gills! The sky was overcast with the dark ominous smoke clouds from forest fires which were being fanned by the hot, dry wind. The sun was visible only as a dull red disc. One young lady remarked at sunset: "Oh! come see the beautiful moon." The only way I know she was mistaken is that a full moon never occurs in the west at sunset—even in Oregon where everything is "unusual."

They tell us that fireweed requires moisture to yield nectar. That being the case this year should give us one of those complete failures that sometimes occur. In seasons less dry than this such failures have occurred that hives lost weight and queens stopped laying in the midst of fireweed bloom. So we expected nothing this year, and as usual guessed wrong. Though our part of the mountains had neither rain, dew, fog, or mist, a positive honey-flow came on. Perhaps it was the high temperature that did it.

The more we learn the less we know. Not being able to predict the good or poor years, we stopped migrating and just established two yards in the foothills where we get a few drips from the fireweed bucket. And if the bucket doesn't drip, and if the sun shines the right week, we get some drips from vine maple, figwort, buckbush, wild berry blossoms, or what have you?

W. L. Arant,
Oregon.

ABJ

Uncle Eben Says:

"Dat bagpipe band wot dem Shriners brung down here sho makes curious musick. Effen ah didn't see dem wid ma own eyes ah'd swear hit wuz a swarm ob bees."

(This is a clipping sent by Alfred H. Pering, Florida.)

More About Diabetes

By J. B. Merwin,
New York.

I have been quite interested in what has been said in the Journal about honey in diabetes. Three years ago I developed diabetes in a serious form. My doctor put me on a strict diet and I was allowed no sugar or white bread, and nothing of any food value. I did not use insulin. However, the diet was severe. I expected to starve to death most of the time during the first year.

I consulted several different doctors and they all advised the same diet and all but one advised the use of saccharin for a sweetening. One said I might have a spoonful of honey a day.

I finally consulted a neighbor boy who is one of the leading physicians and surgeons in the Albany City Hospital. He advised that I take more food to keep up my strength and that I should drop the use of saccharin, which he said was a drug, and stick to honey in its place. I was handicapped by having high blood pressure so things I might ordinarily eat with diabetes I had to give up as my blood pressure was 240. I learned that one must have control of his appetite to follow a diet.

Since then, I have eaten honey on my cereal, in my coffee and on my cakes every day in every way where I used sweetening at all. Mrs. Merwin made preserve and used honey in the place of sugar and in cakes and muffins made from gluten flour. I have not shown any sugar in test since a year ago last January, or for the last eighteen months. I work every day, feel good, sleep well, eat nearly everything the rest of the family eat, only in moderation.

I have tried several kinds of honey and I find that the honey from the wild thyme which grows here, agrees with me better than others, and that buckwheat does not agree with me at all. I do not say this because we produce thyme honey, but it apparently has something in it that others honeys lack. I know for one thing that it contains too much acid, or something, for the bees to winter well on it.

I also got the idea that where one takes a quantity of sweets constantly there should be something to balance it, so I thought of what the bees use for that same purpose and I began eating pollen whenever it was available. We usually have plenty, sometimes full combs of it. All during the period of extracting, I would dig it out of combs and sometimes a few cells of honey with it. It was bitter, but it seemed to sweeten the stomach and I would feel better almost at once.

A Plea For Unity

By Mildred Ross,

Ohio.

AS we read about the meetings of beekeepers, one cannot help but be impressed by the disconcerted interest among the members of our industry. There is the American Honey Institute, national, state and sectional honey producers' associations, state, county and sectional beekeepers' associations, a multitude of organizations which overlap each other. This division of strength can be brought together and united with great profit.

While there is a comparatively large number of beekeepers who devote their entire time to the producing of honey, their number, compared to the smaller beekeepers, constitutes a low percentage. To the larger beekeeper, a multiplicity of dues in different associations may constitute a small fraction of the total honey income. To the small beekeeper, forming the bulwark of the associations' membership, the cost of membership in numerous bodies, constitutes an expense out of proportion to the gross honey income. There can only be one result. They will join no association and those who do are split up among many small groups.

The average American is "size" conscious. Size, strength, quantity and headlines impress him. Consolidation of associations would bring thousands of beekeepers into membership who never thought of joining before.

How to bring about a coordination of our organizations is a matter for study. The following plan might do.

(1) A local branch for each district for local meetings and problems with the elimination of all overlapping associations.

(2) A womans' auxiliary for each local branch to spread the knowledge of the use of honey among consumers and to improve the domestic market.

(3) A state association made up of the union of all the local branches to unify state movements in economic, legislative and other matters. A state auxiliary to do the same for the women.

(4) A national association to be made up from the state groups to operate on the same basis in national affairs as the state groups do in state affairs.

(5) The American Honey Institute as an integral part of the national association to carry on its present work and also to act as national headquarters for the woman's auxiliary.

Nothing here is strikingly different from the present organization plan except the unification of forces and an elimination of overlap and needless overhead. The revolutionary change would be in the financial setup.

Instead of several organizations trying to collect a dollar or more from a scattered membership, one local organization will collect a membership fee of which a fixed percentage would be given to the state and another to the national headquarters with a dollar per ton of honey produced going to the Institute.

This system would be less expensive to the beekeepers now bearing the lion's share of the expenses for a multitude of organizations. But the prestige gained by the unification would induce new members to enter by the thousands, building up a treasury greater than has been possible before.

I would think three dollars to belong to such an organization would be more attractive than a total of three dollars to belong to three different associations little known even in their own territory. The Institute funds would be collected automatically; the outstanding beekeepers of the community would hardly have the audacity to ignore the Institute contribution or just give one or two dollars. This should increase the support of the Institute to the point where it could carry on its program without the spectre of bankruptcy ever before it.

This set-up would bring a coordination that is virtually impossible now. The Institute would have a definite sectional group to whom it could furnish ideas for consolidating the county and state exhibits. It could even build up ideas on combination displays for affairs like this or for such affairs as the world exposition. It would allow materialization of plans for local and interlocal social affairs and contests through the auxiliaries; for open and public suppers through their efforts to raise extra funds for local auxiliaries and to advertise the merits of honey cooked foods.

The national headquarters could develop a national trademark to be used by members whose product measured up to the national standard on honey bought wholesale from members, thus giving the public a brand with a guarantee of quality and purity. This would be an added inducement for membership.

Local groups could facilitate an accumulation of detailed information on the location of honey markets, enabling the national association to analyze transportation and make recommendations on selling prices and prevent the exploitation of beekeepers far removed from markets.

Our economic set-up is moving more and more toward the improvement of distribution to cut costs and to improve and eliminate costs in production. This points more and more toward cooperative marketing. With the unification of beekeepers, there would be less blind groping. The groups where "coop" marketing has been established for other commodities, would give to these new organizations the wealth of their experience and knowledge.

Last but not least, this kind of organization would present a strong front against those antagonistic to the expansion of honey markets and could defend itself against legislation detrimental to honey merchandising like the prohibition by the National Pure Food regulations against the use of the name "Honey Jelly" to be used on jelly made with honey; adopted at the instigation of the glucose interests because they are barred from adulterating honey with their own products.

How can this unification movement be started? Obviously, it should be started by the local groups and state groups so the national would grow gradually. The experience of the ladies' auxiliaries bears out this probability. The first step will be a discussion of the idea at meetings to arouse interest and to give impetus to the plan.

Who can start it? Even one state or one local can start it. If a local organization decides it is interested in this idea, it may write to the state organization to adopt the plan and request a club membership rate. Once the state organization sees the advantages of the plan, it should solicit the membership of all local organizations on the same basis.

A state organization wishing to take initiative may easily circularize local associations offering club membership. The growth would be slow, but it would be healthy. A national unification will come without urging anyone. I think the leaders and speakers at the various association meetings should give this plan a group discussion at their meetings.

[This plan is now followed by some states. In Illinois, for instance, the state association is made up of club memberships among locals. The movement, however, has gone no farther than this. What has been suggested in this article is food for considerable thought. It would be a good plan if it were possible to bring it to pass.—Editor]

Have Your Baker Try This

Black Walnut Cookey

This recipe is for the use of bakers and is taken from "Bakers Weekly." Pass it on to your local bakeshop.

Honey 1¾ lbs.
Sugar 1¾ lbs.
Molasses 3½ ounces
Shortening 12 ounces
Eggs 6 ounces
Milk ¼ pint
Flour 3 lbs.
Chopped black walnut 1½ lbs.
Soda ¾ ounce
Baking powder ¾ ounce
Ginger (optional) ⅛ ounce
Salt ¼ ounce

Method

Cream the sugar, honey, molasses and shortening. Add the eggs. When this has been done, add the salt, spice (if used) and soda and then the milk and stir just enough to break up the mixture. Blend the flour with the baking powder and add to the mixture, incorporate the coarsely chopped nuts.

The black walnut has a tangy flavor of entirely its own and while it is not as well known as it might be, is steadily gaining in favor among bakers.

—ABJ—

Beekeepers Should Burn Their Own A. F. B.

This is the title of a caption in the Indiana Association letter for October. We quote:

"Until we can secure a greater number of inspectors, we believe owners should learn to do their own burning. If inspectors are to cover the work done, they must depend on owners to help. Wherever there are many sloppy, ignorant, don't care beekeepers, there is no reason in the world why the inspector should not find colonies rotten with disease year in and year out. Often supers have been taken from these colonies and after the honey has been removed from the frames, the messy outfit has been exposed in the open or stored somewhere in a stack, insuring a carry over of disease."

That is the truth. A good beekeeper should be his own inspector. Most of the funds spent for inspection are to protect the good beekeeper from the poor one, and goodness knows, there is much protection needed.

—ABJ—

It Will Soon Be Like This

This is a picture of my bee yard to prove that we have plenty of snow here in North Dakota; thirty-four colonies packed in winter cases with top entrances. At the left side is a stick standing up in the snow to show depth, at least three feet over this row of packing cases. This was in 1937.

I thought the bees would smother but found that the snow melted out at the entrance. I dug the snow away in front to give them a chance to fly, as the weather was favorable when this picture was taken in March.

Packing this way has proved to be most desirable. The bees come through tough winters with little loss.

Lewis K. Lawrence,
North Dakota.

—ABJ—

A Rough and Ready Windbreak

This year I made a windbreak for my bees by nailing rusty, discarded sheets of roofing on temporary posts. The "V" shape splits the wind and provides protection against both the north and the west. When summer comes, it will be taken down.

Regular slater's felt and asphalt cannot be bought here so I have used cheap roofing paper for packing cases and fastened it in place with binder twine as the picture shows. Each hive has a super stuffed with packing and there are four inches of packing around and under each hive. I use old cotton mattress for stuffing.

Martin Wilcoxen,
Ohio.

A. J. Cook, 1842-1916

By Kent L. Pellett,

Iowa.

I place Dr. Cook amoung the best of our observers.—A. H. Dunn.

The first professor to teach a course in beekeeping in any college in the United States or in the world.—R. H. Kelty.

A lawyer was on a Lansing stage coach and began to tell a dirty story, as lawyers did and as lawyers do. The passengers all lent their ears. But one Prof. Cook flushed and protested against such vulgarity in public.

The lawyer was contemptuous of such a child's attitude. He said if the professor could not stand man's talk he had better walk. But the young man replied he would walk. He called to the driver to stop. He clambered out.

The lawyer had no time to continue his tale before somebody spoke up and said he had also decided to walk. Caught by the contagion of example, others began to leave, and the coach was almost emptied. Abashed at this turn, the lawyer apologized to the professor, and the journey was resumed. But not the story.

The lawyer and his companions began to look with enhanced interest on the antagonist who had bested him in this joust, which had revealed him as a character of magnetism and force beyond the ordinary to carry the crowd with him in such an encounter. Those rare men who refused to defile their minds were no more popular in the 1860's than they are today.

This Professor Cook, energetic and just twenty-six, was the entomology and zoology instructor at Michigan State College near Lansing. He had started keeping bees at the college in 1868. He had them out in the open on the vast, seven hundred acre campus where people could watch them and see Cook and his students at work. The bees also were visited at night for some students gave way to their taste for sweets after sundown.

That same year a catalog of the college said, "The principles of beekeeping are explained, different hives exhibited and pains taken to make the students practically familiar with the arrangements of the apiary." Thus began at Michigan, then a new college, the first course in beekeeping ever taught in the United States, with Cook as its teacher. But this first course was no makeshift course. He went into it thoroughly, practically, scientifically and made beekeepers of his students.

Michigan is the oldest of our agricultural colleges. It was founded in 1857, five years before Lincoln signed the land grant act providing Federal aid for such colleges. The new school had an outstanding staff of teachers who exercised a dominant influence over the agricultural education of the whole country, as other such colleges were brought into being, first in one state, then in another. So it is not surprising that Michigan also took the lead in the teaching of beekeeping.

Cook taught beekeeping until he left Michigan, and placed this branch of knowledge on a high plane. But, unfortunately, after he was gone, the college forgot beekeeping, which attracted but little attention for many years.

What of this first teacher of beekeeping? What sort of a man was he? He apparently had no eccentricities which a caricaturing writer could make a handle of, for none were recorded. I cannot say, "There goes Prof. Cook. I can tell him by his long nose and his squint eyes and his wheeze!"

He was highly intelligent and a careful observer. He was kindly and a prodigious worker. Those were his characteristics. But one cannot always recognize on the street an intelligent or kindly man. Or even a prodigious worker.

But it is agreed that Cook was born to his profession, that of teaching, and that he was successful. He was esteemed and loved by his students. He had "that divine gift of enthusiasm for his work which is the first requisite of a great teacher," said one of his students.

"His interest in his students has been always a living, active interest, that went right out and fought for them," said the Pomona college paper, where he later taught; "an interest that not only helped them to find their life work and get into it . . . but ever afterwards supported and encouraged them to great efforts."

It is testified that he loaned or gave money to students in need. Surely, the zeal of a teacher can be expected to go no farther!

Albert John Cook was born in 1842 of Ezekiel and Barbara Ann Cook on their farm in the Maple Hill neighborhood near Owosso, Michigan. He grew up on the farm and early showed a great interest in nature. "He was a born naturalist," says Dr. Francis Kedzie. He attended the country schools in Shiawassee County, then he went to Michigan State College and graduated with the second class ever to leave that school.

This is the old story of the poor boy who succeeded through hard work and a conscientious attempt at service. It has happened so often in this country that it has been worn threadbare by the telling. But this true American story of success, the story of a boy, who is cast without advantage on the hard and uncompromising wilderness, rising to exalted heights, is no less thrilling

for all of that. It should be told more often now that the signs all say we are beginning to lose that ancient faith.

Perhaps no youth in the world throw themeselves into their studies with such abandon as those freshly released from the drudgery of the farm, especially the early pioneer farm. Those students who lay down their axes or eased their grip on the plow handles to go to the raw college newly created out of the wilderness at Lansing, went with the zeal of apostles entering the promised land. Always at the state colleges there have been farm boys who worked both night and day, catching only here and there a few minutes of sleep. And, somehow, their constitutions, rugged with the red-blooded life of the farm, seemed to stand up under such efforts.

Cook was used to rising at four o'clock in the morning. He kept it up after he enrolled at Michigan, and after he was a professor, and worked long hours with great vigor. "He was a farm boy, full of enthusiasm," says Dr. Kedzie. He did not lose his farm habits in fifty years of college life. Often his head lolled sleepily at eight o'clock of an evening, while the college night owls were scarcely yet on the wing.

His constitution, however, must not have been entirely immune to the effects of overwork. At graduation he went to California hunting a cure for lung trouble. There he taught for three years. Feeling himself recovered, he took two years of work at Harvard. Then, at twenty-five, he became instructor of mathematics at Michigan. A year later he was finding himself as professor of zoology and entomology.

When Cook included beekeeping in his classwork, at once he became one of the prominent beekeepers of the country. He attended the conventions and wrote for the beekeeping magazines. In 1875 Editor A. I. Root, of Gleanings in Bee Culture, listed him among the leading beekeepers. "He has shown himself ... one of our cleverest thinkers," said Root.

When the government experiment station was established at the college in 1888, Cook was the entomologist in charge, and carried on the first experimental work with bees at the college. He was one of the first to ask for measures for foulbrood control. He was the first to use kerosene emulsion for direct control and to recommend the use of arsenates in the control of the codling moth. But his careful eyes also soon noted the danger to bees when fruit trees were sprayed in bloom.

Probably his most important work for beekeeping was in proving the vital link between bees and the yield of fruit. He covered trees with mosquito netting at blooming, while leaving others bare to the visits of bees and other insects. The difference in yield seemed incredible. People would hardly believe it. But he carried on the experiment on so large a scale as to leave no doubt of the value of bees in the production of fruit.

At the farmers' institutes Cook was in demand for his talks on bees and insects. He helped to form the Michigan State Beekeepers' Association and usually acted as its presiding officer. He served as president of the National Beekeepers' Association for several years.

In the late 1870's the post office department ruled queen bees could no longer go by mail. There were complaints that the bees often escaped from their boxes or that the honey for their feeding ran out into the mail sacks. So the queens were excluded from the mail. This was a calamity to queen breeders and their customers. They chose Cook to present their case at Washington.

Enroute, he fell in with the party of the president of the United States, Rutherford Hayes. He visited with the president in his private car, placed his case before him. The president gave him an introduction to the proper officials at Washington. The matter was arranged. Bees again went into the mails. But not until Cook had made two suggestions for eliminating difficulty with the stinging insects and their sticky sweets. Hereafter, all cages were to be covered with a double thickness of wire gauze, and sugar, not honey, was to be used for feeding.

In 1876 Cook published his book, "Manual of the Apiary." It was composed of his classroom lectures. Its readers could not doubt the thoroughness or the science of the professor's teachings, or that he was offering a real course in beekeeping at Michigan. A. H. Dunn called the Manual one of the most interesting books he had read. It was scientific, he said, but had little theory in it. "Its clarity and style are unusual, its general arrangement most convenient."

In those days it seemed easy to make a fortune in beekeeping. Men with a few hundred colonies were making comfortable livings. Cook, himself, sang an optimistic song about the profits of beekeeping in his frequent articles to the press. But he was no professor who only sat in a chair. He had demonstrated that there was money in bees. "If I except disaster in wintering, which has only occurred twice, I have never failed to secure 200 per cent net profits, and have often realized over 300 per cent," he wrote. "This is no guess work, but a fact built on the secure foundation of past experience." He reported that his bees netted thirty dollars per colony.

His heart, however, was in the classroom, where he taught beekeeping as a delightful avocation. Under his spell, students graduated and became beekeepers, with a few hives or with hundreds. Some prominent men sat at his feet. In the class of 1879 was Frank Benton, who became apiculturist at the United States Department of Agriculture and spent years in visiting the beekeepers of the old world and in importing bees of many strains to this country. A student during the early seventies was William L. Porter, who became president of the Colorado Honey Producers' Association, and who a few years ago was an extensive beekeeper in Honolulu.

At this time Root, the restless editor of Gleanings, visited him and was impressed with this young man's close relations with his students. Root was astonished to enter the classroom and find Cook lecturing these young farmers on night dresses. They should at night lay aside every stitch of their day clothing, he admonished them, down to and including their red flannels, and don night dresses. It was a novel idea to the country lads. They had associated nightgowns only with women folks.

Cook had married and was raising a family. Open-hearted and popular as he was, he kept the veil drawn on his family life. At least, it never got into print. We are privileged to know little. He married twice, and raised two children, Albert and Katherine, both of whom graduated at Michigan. Albert became a state senator, while Katherine married Dr. L. J. Briggs, of the Federal Bureau of Soils. We have one glimpse of the family at its daily worship, with the children reading the Bible in both English and German, to accustom themselves to the foreign tongue.

In 1893 Cook yielded to the golden magnet of the West that drew men in great numbers across the continent, and became professor of biology at Pomona College in California. There his work continued after the same pattern, with the same cordial relations between him and his pupils, the same long hours and the same zeal for work, which was imparted to his pupils as a burning flame.

There, too, he worked with the farmers' institutes, lecturing on horticulture in all parts of California. He helped to form eighty-nine farmers' clubs. Through these he built a political machine to work for horticultural legislation in that great fruit state. His untiring efforts at length won out under the liberal governor, Hiram Johnson, and the legislation he wanted was placed on the statute books.

Johnson made Cook state horticultural commissioner of California, with $100,000 at his disposal to spend in the work, a large sum in those days for a state official to have. That was in 1911. But a few years later his health failed. Then he turned to the old Maple Hill neighborhood where he was born and where his son now lived on the farm. He wished to spend his last days there. He offered his resignation to the governor.

But Johnson refused it. So Cook went to Maple Hill, still nominally the horticultural commissioner of California, and lived the short time alloted him among the scenes of his boyhood.

—ABJ—

Mysteries in the Beehive

By J. F. Diemer,

Missouri.

THE commercial beekeeper should know how to control disease, how to control swarming, how to divide and unite, how to requeen, how to prepare bees for winter, how to put on supers and how to extract and market his honey.

The average honey producer is after the dollar. He need not care what goes on in the hive as long as it goes his way. He is not concerned about the anatomy of the bee. As far as he is concerned, the antenna, or any other organ of the bee, is of minor importance. There is no mystery in the beehive because he doesn't care anything about it. All he cares about is a good honey crop and a good market. The commercial producer is a good business man. He knows the things he needs to know and he knows them well. He lives well and enjoys life.

So why should one wish to know about the hidden mysteries of the hive when there are no special profits in it? Many beekeepers have said, "There is nothing about bees but what we know." However, it has never been told why some colonies swarm once or twice and others swarm many times and would continue to do so until it were ruined if the beekeeper did not come to its rescue. It has not been told why, after the first swarm, the colony is divided up into factions like political parties, each faction consisting of a few bees guarding a virgin still in the cell. Many such groups are seen. This is a plain case of disorganization. Why do such things happen?

How do bees know when to come out when it is time to swarm? Is there a signal? Who gives it? Why is it that when a swarm comes out from a parent colony and the weather is unfavorable, it will starve to death before a bee will go to the old colony for a supply of food? Why does a colony in the preparation of swarming build a large number of cells when two or three would be enough? Why is it that bees will not destroy capped cells, but will destroy uncapped ones? Why do bees sometimes almost kill the only virgin in a hive and then relent and treat her kindly, accepting her to head the colony when it seems to the beekeeper that they should know that she is worthless and can never be a fertile queen?

Why do the bees sometimes try to rear queens from drone larvae? Why will a colony accept a drone laying queen and make no effort to supersede her until her drone brood is almost ready to be capped? Why will bees feed and take care of brood from laying workers and not destroy the runty drones which are useless to them after they emerge? Why will bees try to raise drones from laying worker brood?

But here is a mystery that seems utterly unsolvable to me. A three story hive, without a queen excluder, with a good laying queen, with brood and capped cells in all three bodies, on one of those bright sunny mornings when bees seem to delight in swarming, was looked over and ripe cells in all three stories carefully removed.

The queen was found, caged and placed in my pocket. The two upper stories were taken off and placed on bottom boards ten feet from the lower hive, on different hive stands. The work was done early in the morning. The only queen in the hive was in my pocket. None of the cells had been opened and every cell was removed.

Here is the mystery. At eleven o'clock each of the three parts of the original hive swarmed at precisely the same minute; all came together in the air, soared around a few minutes and settled on the limb of a tree.

They remained on the limb twenty minutes and returned to the hive from which they came. Many of them went back to the hive which was on the old stand. While the bees were out, all three parts of the original colony were examined and no cells were found.

The same thing would have happened to any colony handled in this manner. It would only be necessary to know just when they are to swarm. In this case there could be no signal as each section was without a queen. This is a mystery which I must leave unsolved. I have no idea when or how to begin to find an answer.

The work in a beehive is done under cover, hidden by the bees clustering over their combs, and it is hard to see what they are doing. Of course, we can let these mysteries stand, but if we were able to solve them, we would know all about our friends. Perhaps we would lose much of our interest in them. Who knows?

—ABJ—

Cure for Price-Cutter

By Edward Puhl,

Wisconsin.

AS long as a beekeeper descends to the bottom of the ladder and becomes a "price-cutter" selling his honey below market prices when he cannot be excused for it, he is in a shameful position. He not only degrades himself to the buyer but the buyer makes a monkey out of him.

There is one thing certain, either the price cutter does not know what the market price is, or else he does not know what to ask for it before he goes to market with it. He cuts the price because he hasn't the nerve to ask what the honey should bring. He has a weak spot in his head or in his heart.

Not long ago a beekeeper came to market with 1500 pounds of honey and asked the A & P chain store manager what he was paying for honey. Can you imagine the location of the weak spot in this beekeeper? It wasn't in his heart.

He should have known the price of honey before he ever loaded up with it and went to market. Honey is a product on which the beekeeper can set a price. He is not like the farmer who sells grain or other farm products, later stored in elevators or storage plants to be gambled with.

Did a beekeeper ever hear a honey market quotation over a radio? I should say not. There "ain't no sech animal." But there is a semi-monthly report on the current price of honey issued by the United States Department of Agriculture Market News Service from the Bureau of Agricultural Economics, Washington, D. C. Also in many states the state association has a price agreement in effect. The best way to cure a price cutter would be for all beekeepers to boycott him or advertise him.

Bad beekeeping. Not a business outfit. But with honey to give away receiving good will, this beekeeper may get more than the man with up-to-date equipment who puts up a poor pack at less than cost.

Good Will and the Profits

By Walter H. Hull,

North Carolina.

NOT all beekeepers are business beekeepers. Anyone selling honey at retail cannot fail to be struck by the great number of people having friends or relatives who give them honey each year. Those are the non-business beekeepers, producing honey primarily for their own use or to give away; and there is an enormous number of them. But don't jump to the conclusion that they get no returns from their bees except the honey consumed at home. The honey that they give away, whether they consciously intend it so or not, serves as payment for social debts and similar obligations; or else goes toward building up good will for the family.

And speaking of good will, it is one of the many intangible things which (believe it or not) are recognized even by the courts as having real money value. In many a business whose value runs to six figures, or even more, good will is one of the important items in the list of assets, sometimes the chief item. One of the toughest problems in business management is to know how much of the income should be put back into the business. New equipment, advertising, selling campaigns, can be postponed or curtailed in some degree, but the one thing that can never be jeopardized, if the business is to remain sound, is good will.

Thus the beekeeper who gives away the bulk of his crop may be getting larger returns for it than if he sold it for money, the money returns showing up in the form of larger profits from his regular business, whatever it may be. In this he differs from the business beekeeper who produces honey to sell directly for cash only in that the two are engaged in different lines of business. For the business beekeeper's need for building up and maintaining good will is no less imperative than that of a man engaged in any other line.

He is confronted by the same tough problem of how much money to re-invest in the business. And often his hives may warp and crack for lack of paint, and his operating cost run high for want of equipment, while plans for the new honey house lie unused in his desk until he even forgets they are there. All this can take place, and more, and still his business remain sound and intact. But if by hook or crook or carelessness he jeopardize his good will, then the business begins to totter, though his hives gleam with new paint and

Beekeeping with equipment like this represents a heavy investment and a heavy operating cost. Will honey from this yard sell at a profit or at a loss?

his new honey house be filled with the last word in up-to-date equipment.

As an example, I was talking recently with J. R. Pinkham, a veteran Carolina beekeeper, who mentioned having called at an apiary a day or two before where they were extracting honey from half-capped combs, and putting it up in pails directly from the extractor.

Bits of wax from the extractor might not hurt the chunk honey pack, such as this was, but honey directly from the extractor contains a great deal of propolis, that gives about the same effect when eating it as sand in spinach. But its presence is less excusable than sand in spinach because, after all the spinach itself cannot be strained through a cloth and honey can be—and should be.

If the popularity of the chunk honey pack among beekeepers is based on the assumption that honey can be put up directly from the extractor then the more unpopular this pack becomes the better it will be for the industry.

In the case mentioned, besides this bad practice was the fact that the honey was unripe. As Mr. Pinkham pointed out:

"In less than a month the lids will be popping off those pails . . . It gives honey a bad name!"

In respect to beekeeping and to business, that man was neither "fish, fowl, nor good red herring." He was jockeying himself into a position, if he had not already reached that point where, in order to dispose of his crop he would have to give away his share of the profit in it and probably part of the cost of production, so that he could not by any stretch of the imagination rank as a business beekeeper producing honey for profit.

Nor could he claim membership in the ranks of that splendid army of non-business beekeepers whose honey contributes toward the increase of good will among men; for he was not giving it away outright. He gave away his profits. But he received no good will in return for what he gave; and no profit from what he sold.

—ABJ—

Is It True

Bees, if they pay a fair return, mean more than the monetary value. They are an absorbing interest. I feel sure that so long as it exists my apiary is going to be a place where much happens. I read everything I hope will help me become more expert in beekeeping. This is only my third year, producing extracted honey, and there is much room for improvement.

Eleanor J. Neale,
Michigan.

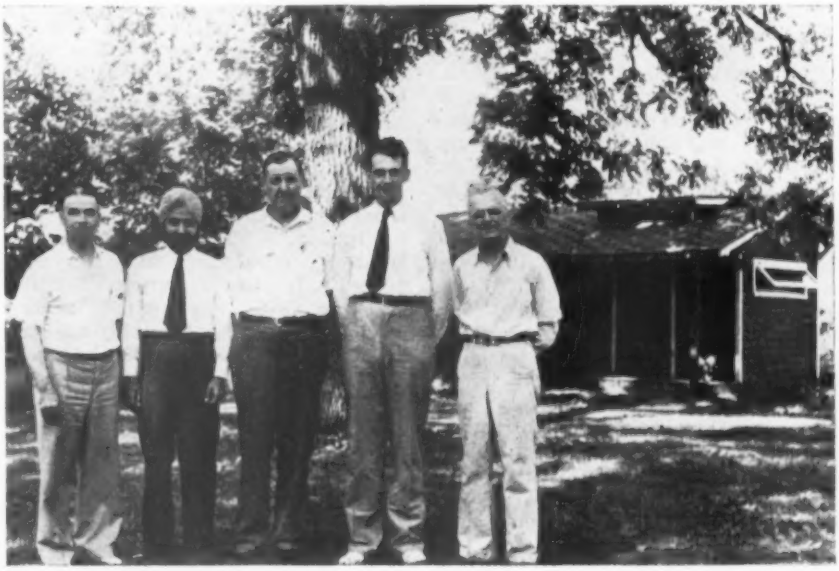
Our Honey Plant Test Plots

The kids and their teacher get a day of thrills.

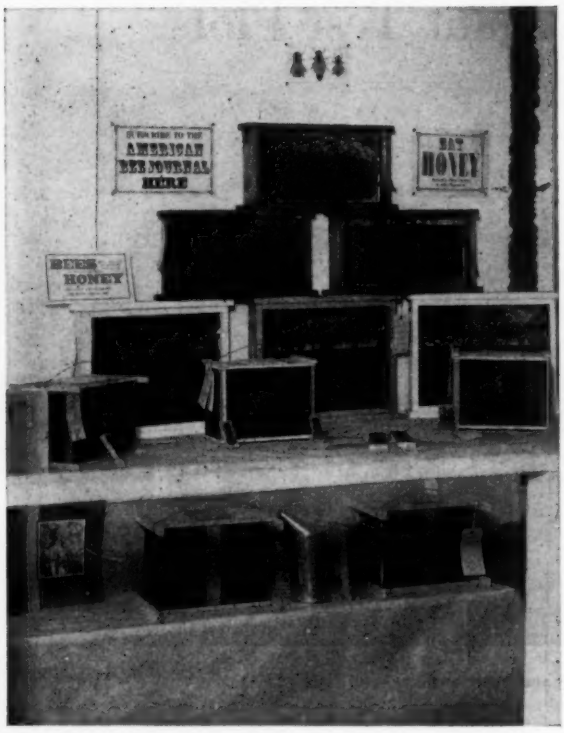
THE American Bee Journal honey plant test plots at Pellett Gardens, Atlantic, Iowa, continue to be a source of attraction to many different groups. Like the boys and girls in the picture above, schools send their children to learn about nature first hand. Mr. Pellett likes them and gives them much in return for the trip.

Then, too, beekeepers and those interested in the place new plants may have on the farm like to see what the flowers look like and to cast their own ideas about our honey plant tests. That is good as it often leads to tests in other places and under more extensive plantings so in the end we may have worth while additions to farm crops that also yield honey.

Today we depend too much on sweet clover and too little on other flowers that may be equally good. This is true to the point where, in seeking locations, values are judged entirely by sweet clover acreage and by little else.



Visitors come from far and near. Left to right, Dr. O. W. Park of Iowa State College, Sardar Singh, of Punjab Agricultural College, India. F. B. Paddock, Iowa State Apiarist, McMillan of the State College, and Frank C. Pellett, Pellett Gardens.



Live bees at Alabama State Fair.

The Story of Alabama's Third Honey Demonstration

By Thomas Atchison,

Alabama.

THE cooperative spirit which thrives in the hearts of Alabama beekeepers and bee breeders was given formal recognition when for the third consecutive year a honey demonstration booth was arranged during the Alabama State Fair held September 26 to October 1.

The exhibit and demonstrations were sponsored jointly by Mr. R. J. Goode, Commissioner of Agriculture, and Mr. P. T. Strieder, manager of the State Fair. Armour's, Birmingham Electric Company through their dealer, Flint Refrigeration Company, White Lily Flour Company and Foremost Dairies contributed to the program by furnishing tenderized "Star" hams, Vegetole shortening, White Lily flour, Foremost butter and milk.

The demonstration booth was right across from the bee and honey exhibits in line with the White Lily flour and Armour booths. At an angle less than twenty feet away was the Foremost Dairy booth. This made an ideal set-up, for the visitors would first see the butter cow with milkmaid, pail in her hand (life size models of solid butter), hear the butter story, then to the Armour booth to learn all about choice meats, next to the White Lily flour booth and have a hot biscuit. Then they came to the honey demonstration booth, hot biscuit in hand, to have honey from the dripcut dispenser dropped on the hot biscuit. As they stopped to enjoy their biscuit and honey, their eyes would catch the great variety of honey foods covered with cellophane and the next instant they were smelling the delightful spicy fragrance of gingerbread baking in either the roasters or the Frigidaire range.

Hardly had the visitor finished asking about the gingerbread when she would note the tempting odor of the **ham with the honey pocket** and after numerous questions about this feature, would come the "always popular smell" of freshly baked cookies being taken from the oven by Rosa Lee, the colored maid. The combination was perfect for after hearing about good butter, certified meats, perfect flour, the visitor was most eager to learn what happened when all of these fine foods were combined with Alabama's honey. And when the opportunity actually came to taste the result, visitor after visitor would remark, "What a grand finale."

From early morning until late at night honey foods were prepared and distributed. Many questions on honey were answered. Due to a record breaking attendance the work was continuous. Mrs. Malitta Jensen, Madison, Wisconsin, who has conducted our demonstrations for the past two years, was again in charge of this booth. She was ably assisted by Mrs. H. C. Short, Mrs. Hubert Norwood, Mrs. Jean Cutts, Mrs. R. T. Marshall and Mrs. J. P. McLaughlin.

These exhibits were put on by Hubert Norwood, of Birmingham; Gene Cutts, of Montgomery; H. C. Short, of Fitzpatrick; W. E. Harrell, of Hayneville; and Bagby Bee Hall. These were the most beautiful exhibits that has ever been put on at the fair. They were beautifully arranged and well lighted.

Besides demonstrating the use of honey to the visiting public special classes were held for restaurant cooks and colored cooks who had been sent by their employers to learn how to prepare the ham with the honey pocket, the gingerbread with the honey lemon filling, and the many honey cookies shaped through the Swedish cookie press. Their employers had previously sampled these combinations and were anxious to have the quality and flavor duplicated in their home food services or restaurants.

Birmingham offers splendid opportunities as a honey consuming center. Visits to stores and markets during the past three years provide conclusive evidence of the increased consumption resulting from programs such as the one described.

Each year there are between twelve and sixteen car loads of honey shipped in to Birmingham besides the package goods that are shipped in by the honey packers. You will find the Land O' Lakes honey from Wisconsin in every grocery store in Birmingham. We have no way of telling how much honey is trucked in from Florida, Georgia, Mississippi and Tennessee.

Alabama can never produce the amount of honey necessary to meet the demand of Alabama residents or guests. Producers in other sections are realizing that the market is there and more honey is being shipped in to our state. After three years of serving as superintendent of the Bee and Honey Department at the Alabama State Fair, I am thoroughly convinced that honey demonstrations

Left, the complete exhibit. Below cooking demonstration space, with Mrs. Jensen in charge.

of this character play a major part in obtaining for beekeepers everywhere increased consumption. Fairs in every state whether in the North, South, East, or West offer equal opportunities. Hams with honey pockets, honey gingerbread with lemon filling, honey cookies of all types and shapes have an equal appeal to the fair visitor. Because the story is different and unique, the visitor remembers it and I know from careful checking at many stores and markets that such a program is worth every dollar it costs.

I sincerely hope other sections will start now to get similar programs underway for their 1939 fairs. Only by contacting many firms and departments early in the year can arrangements be made for the ideal set-up. Alabama is glad to have you see the picture of its bee and honey display and demonstration booth. We are grateful for the fine cooperation of our Commissioner of Agriculture, Mr. Goode, and our State Fair manager, Mr. Strieder.

Without their help and that of the commercial companies previously listed, our fine honey cookery program would not have been possible.

—ABJ—

Reducing Propolizing By Caucasians

By Dr. V. G. Milum,

Illinois.

IN the fine article by Dr. O. W. Park "Is There a Best Race of Bees" appearing in the September 1938 issue of the American Bee Journal, the author suggests "that some plan might be devised by which the inconvenience occasioned by the trait might be greatly reduced or eliminated." This was in reference to heavy propolizing by the Caucasian colonies especially at the hive entrance. Most of those beekeepers who have given Caucasians a trial, at least in certain localities, have found that often frames could hardly be pried from the brood chamber.

We made a suggestion to one of our students who gave the following plan a try in his own yard with good success as the result. Simple and he said that it worked. A flat board with a straight edge the length of the width of the bottom board and the width of the portion of the bottom board projecting in front of the brood chamber was laid across the bottom board forming a ⅞ inch tunnel. With this straight edge fitting tightly against the outer front wall of the brood chamber the Caucasian bees did their entrance propolizing at the outer extremity of the tunnel thus formed leaving the lower front corner of the frames fairly free from propolis.

How to Use Paradichlorobenzene

Paradichlorobenzene is the name of a chemical used in fumigating bee combs and is available from bee supply dealers. It is five times as heavy as hydro cyanide gas and, like carbon dioxide, tends to go down, not up. I use two tablespoonfuls of this fumigator to the super, stacking them nine and ten deep, putting the material at the top, as mentioned, and covering the stacks to make them fairly air tight. It is probably best to distribute the reagent throughout the stack rather than in one place.

It is a valuable weapon and it is safe to keep in the cellar with children about. I never would have calcium cyanide or any other cyanic acid gas about my house because of the danger.

Frederick Garman, Pennsylvania.

Honeybees Visit the Night-Blooming Cereus

By Natt N. Dodge,

Arizona.

A honeybee burrows towards the source of nectar in the Cereus.

ALTHOUGH confined to the semi-tropical, arid sections of the world and therefore seen by relatively few people, the Night-blooming Cereus cactus **(Peniocereus greggii)** is famous for its rarity, the unusual beauty and fragrance of its spectacular blossoms, and the fact that the flowers appear during the hours of darkness and remain open for one night only.

Having read much about the "Goddess of the Desert." I consider it a unique opportunity to have been present at Casa Grande National Monument, Arizona, on the night of July 5, 1938, when the half dozen Cereus plants in the immediate vicinity flowered. As will be noticed from the accompanying photographs, the Cereus plant is a very unpretentious affair of gray-green stems without leaves. As it usually grows beneath the low-hanging branches of a mesquite tree or creosote bush, it is easily overlooked.

On the afternoon of July 5, someone noticed that the buds on one of the plants were spreading at the tips, so the word was passed around that the Cereus might bloom that night. Accordingly, I kept close watch of the plants. About 7:00 P. M., half an hour before sunset, several of the buds began to unfold and by sunset were partly open. It was not until 9:00 P. M. that all of the blossoms were open and the fragrance became noticeable as far as 100 feet from the plants. The sweet, rather heavy perfume saturated the air much as the elusive fragrance of an apple or orange orchard settles over the surrounding countryside in the evening. The pure white, waxy petals tinged beneath with pale lavender, and the delicate crown of gold-tipped stamens gleaming under the full Arizona moon, like starry lights in the silent desert, made a never-to-be forgotten sight.

Soon after daylight the following morning, I was on the job with my camera in the hope that the blossoms had not entirely faded. Shortly after sunrise, I was surprised to see a honeybees hovering above one of the flowers. Within a few moments, several more were wallowing among the stamens and, by the time I had made a few exposures, at least a dozen bees were sizzling over the blossoms or burrowing deep toward the nectar-filled centers. I have never observed bees show such great excitement, and they moved so rapidly that it was impossible to obtain an unblurred photograph. Inquiry revealed the fact that the nearest hives were approximately a mile and a half distant, air line. By 8:00 A. M. all of the flowers had faded and closed resembling the original unopened buds.

Although its night flowering habit and the fact that it is so scarce and remains open for such a short time prevents the Night-blooming Cereus from being of any importance to the beekeeper, the great excitement which the bees showed in visiting the blossoms, and the fact that they were attracted from such a relatively great distance within such a short time following the opening of the blossoms, should be of some interest to the profession.

(Above) Just before sunset the buds begin to open. (Right) At sunrise, Night-blooming Cereus flowers begin to fade.

Fifty to One Isn't In It

Page 404, A. B. J. September 1938 carries an article headed FIFTY TO ONE. (The value of bees for pollination.)

Fifty to one isn't in it! Some years ago we moved into a house, neighbor to a garden in which were several apple trees. The lady over the fence said she was going to root out these trees because they had not borne fruit for many years. She considered them to be barren. My father pleaded with her to leave the trees another year as he was going to put some hives of bees in our back yard and he was certain that the trees would yield some fruit. The lady wanted to know what bees had to do with the production of fruit and he told her that the bees fertilized the blossoms. She was skeptical, but agreed to leave the trees one more year and if they bore no more fruit than in former years, they would fall before the ax. Another thing that amazed her was that the bees would go over the fence. I hesitate to tell how many boxes of apples the lady harvested the following year for fear of being considered a boaster, but she was highly gratified and we got our share of the apples as payment for the work done by the bees. Needless to state the trees remained.

Bevan Ll. Hugh,
White Rock, B. C.

—ABJ—

My Favorite Method Of Packing Bees

By R. Selwyn Wilson,
Idaho.

HERE in Idaho, many beekeepers cover their bees with straw and dirt using Italian bees in standard hives. I used to do it, too, but have given it up because of drifting and trouble with foulbrood by having the bees too close together, and the labor of packing and unpacking. Covering the hives with straw and dirt preserves them from the weather but it is of no other benefit that I know of. It may retard spring building if left on too late.

I prefer to use the best of the gray bees and their crosses. Before the honeyflow, I like to see young bees in the brood combs with brood in solid sheets a foot deep by seventeen inches wide and clear to the top bar. When the surplus honeyflow starts, I like to see the brood chamber and supers full of bees from bottom board to lid. In the fall, I prefer brood chambers heavy with bees and honey in deep combs, so the bees may cluster on plenty of honey in a natural way, the bees on the inside protected by those on the outside.

I like to have a warm top cover to help get young bees solidly in the brood combs to the top bar in the spring. This simple procedure will result in more bees in the hives in the spring in this locality than any method of packing Italian bees. There will be more surplus honey, less foulbrood to take to bonfires, and less need to take a bank loan home.

This is a Scotch idea and not patented, but those who use shallow brood combs and Italian bees may not want to take advantage of it. I have had Jumbo hives permanently packed. In the spring they have more honey but less brood and generally less surplus in the fall. By leaving a shallow walled hive on top the year round, these packed Jumbo hives do well except that they are expensive property and not so durable as single wall hives.

Some have told about the use of galvanized iron set up by the hives in fall and left until time to super the succeeding year. This is a good idea, too, in this locality. It keeps the hives protected from the wind and the winter and does not allow so great a fluctuation in temperature. Bees build up faster in the spring. I consider in this locality that the bees are well able to pack themselves just as they do in nature.

—ABJ—

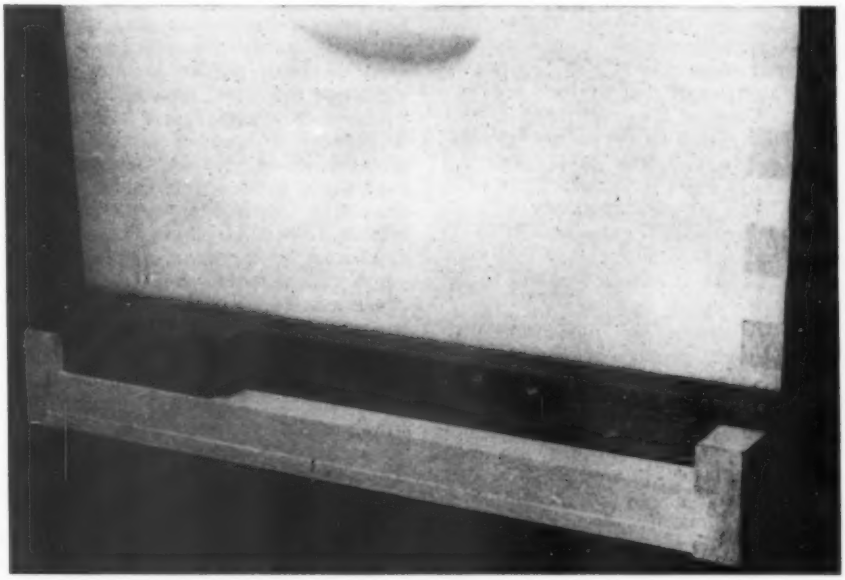
Rajah Buys Bees

The Rajah of Travancore has interested himself in beekeeping in southern India and is purchasing hives and colonies from West Australia.

(Clipping from Mrs. Lucy F. Pettigrew, Virginia.)

—ABJ—

Bee Entrance Guard

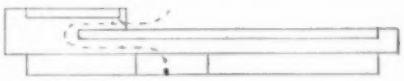


Here is my bee entrance guard which I have used with the best of satisfaction. It puts the bees in the dark. It shuts off wind and cold. Has a good alighting board, keeps robbers out and the bees can go out or in at any time they wish to fly.

About September 1 I put in the old-fashioned guard with ⅜x3 inch opening and later in the season just slip this guard in front as shown in the picture, leaving the ⅜x3 guard in place on the hive. I drive two shingle nails, one at each side or end, and all is well.

William F. Haag, Kansas.

Perspective, showing entrance guard in place on hive.



Bottom of guard, dotted line showing path of bee in entering hive.

The Beekeeper and the Weather

By Edgar Abernethy, Jr.,

North Carolina.

EVERYONE who engages in agricultural pursuits is affected by the vicissitudes of the weather, and the beekeeper is no exception. He can protect his bees from extremes of temperature, both in summer and winter, with comparative ease, but when honeyflows fail, there is very little he can do about it. Sometimes he can salvage something by moving his bees to a more favored locality, but beyond that he is helpless.

In many regions, particularly where honeyflows depend upon cultivated crops, such as alfalfa and the clovers, drought is the chief cause of failure. Such is not the case here in Piedmont North Carolina; our greatest hazard is rain. Cold weather during honeyflows often cuts our crop, too, but drought seems to have no adverse effect, except upon the flow from Korean lespedeza, which blooms in late summer, and occasionally yields a small surplus. I once thought the sourwood yield was dependent upon rainfall during or just previous to the time of blooming, but I have been compelled to revise my opinion. Two years ago the yield was exceptionally good with very little rain, while last year we had plenty of rain, and no sourwood honey at all. Just what the controlling factor is I cannot say, but it doesn't seem to be moisture.

The reasons for our immunity from drought damage are simple. Our annual rainfall is heavy; even in a dry year it is more than the average for many sections. The important honeyflows come in spring and fall, early enough or late enough to escape mid-summer droughts, while the sources are mainly trees and weeds which are very slightly affected by drought in any case.

I believe, though, that our weather hazard is fully as great as that of any region. Maple, fruit bloom, willow, black gum, crimson clover, and blackberry provide a practically continuous flow throughout March and April, but it is seldom of much value to us. When the weather is warm and dry, bees build up rapidly, and even enter the supers and store a surplus from these early sources. Such is the exception rather than the rule, however; our usual spring weather is characterized by clouds, rain, and cold winds, and sometimes bees are confined to their hives for a week or so at a time. It is quite common for stores to be rapidly depleted at this season, until, if the beekeeper is careless, his colonies dwindle in strength, rather than build up, and even, in extreme cases, perish from starvation.

A few years ago I permitted my bees to go without attention for a short time just previous to our main honeyflow, which usually opens about May 5, with the poplar blooms. When they should have been ready for supers, and I began to put them on, I discovered that stores were exhausted, colony population was far below what it should have been, and even brood rearing had slowed up. Needless to say, I secured a very light crop that year, for our heaviest honeyflow lasts no more than three weeks, and, for best results, the bees must be ready.

Two consecutive weeks of rainy weather are quite common here at any season of the year, and when one of these rainy periods happens to coincide with poplar bloom—an occurrence by no means rare—the best we can hope for is half a crop. The same is true of our fall aster flow, which comes in October. No surplus is expected from it, but we depend upon it almost entirely for winter stores. October is usually a dry month, but for the past two years it has been excessively rainy, consequently heavy fall feeding has been necessary.

The best season ever known here was due to a protracted drought, no rain fell from mid-April until late June, and then only light showers. Bees never ceased comb building from the time they entered the supers early in May until sourwood bloom was over in early July. In a wet season swarm control is merely a figure of speech, but this year, with nothing to interrupt work, it was easy, and the total yield was very large.

As I stated in the beginning, the beekeeper is helpless in the face of unfavorable seasons, nothing he can do will compensate for crop failures. However, there is one thing which, up to a certain point, may be considered weather insurance, at least in a climate like ours. It won't make a honeyflow where there is none, but it will make it possible for maximum crops to be secured, both in good seasons and bad ones. I refer to the practice of providing plenty of stores, particularly during the building-up period of spring. Whether these stores are honey or sugar syrup, and whether they are provided in the fall or in the spring, are points to be decided by the individual. The important thing is to be sure that they are always present.

If this is done, and colonies are headed by vigorous young queens of good stock, the primary factor in high yields—strong colonies—will be automatically assured. The most important thing in beekeeping is maximum colony strength at the beginning of, and throughout, the honeyflow. Nothing will do quite so much to achieve this result as plenty of stores.

ABJ

Suggestions to Secure Ripe Honey

(1) Honey should not be removed from the hives during cool or damp weather by the use of the bee escape. In cool weather the temperature above the bee escape drops, causing high relative humidity in the supers, in turn permitting the honey to absorb moisture from the air.

(2) After removal from the hive, unless extracted immediately, honey should be stored in a warm and extra dry room. Hauling to a central plant permits honey to cool too much for safety in cool, damp weather unless properly stored. Storage in an unwarmed honey house may allow the honey (even when well sealed) to absorb moisture so as to increase the water content to the danger point.

(3) For honey after extracting, the storage tank should be in a warm, dry place and covered as tightly as possible, for honey in storage may absorb large amounts of moisture from damp air.

(4) After being placed in storage containers (kegs or 60-pound tins), the honey should be sealed tightly. It is especially difficult to prevent absorption of moisture through the kegs, hence they should be stored in a dry and preferably in a warm location.

(5) The danger of fermentation is vastly increased after honey granulates, because the crystalline portion of honey has a low water content, and the liquid portion (about 80 per cent of a firmly crystallized honey), has an increased water content.

(6) Fermentation may be prevented completely by heating honey to 160°F. for a period of about ten minutes, but honey heated to that temperature for a half hour is usually darkened and injured as to flavor. If heating is undertaken, the honey must be cooled to about 100°F. immediately. Honey is always injured if run into a large tank or **even into 60-pound tins** while hot. **Buckwheat**

honey should never be heated in the honey house.

(7) A low temperature will prevent fermentation, but if the cool room is moist, this only makes later fermentation more probable.

(8) Since the danger of fermentation is usually greater for honey extracted in cool weather, and since this year there is more than usual damp weather, the beekeeper will do well to use every possible precaution to prevent a heavy loss from fermentation of late honey. But above all, it must be remembered that heat applied to honey is one of the most dangerous undertakings that may be tried in a honey house. This is especially true of buckwheat honey. Warm, dry storage before and after extracting will do more to prevent loss than anything else that can safely be done. A week of warm, dry storage of honey in combs may reduce loss enormously.

(This is verbatim from a special notice from the College of Agriculture, at Ithaca, New York, prepared by George H. Rea. They are mighty good suggestions.)

—ABJ—

Sainfoin

In your editorial on "Sainfoin" in the August number of the Journal, mention is made of the fact that good reports come from it in the mild climate of British Columbia and the inference is drawn that common strains of the plants are not sufficiently hardy for your northern climate. It must not be overlooked that we have a wide diversity of climatic conditions in British Columbia and the field of fifty acres of sainfoin to which I had reference in a previous letter is located on the Interior Plateau at an elevation of two thousand feet above sea level where winter temperatures drop occasionally to forty or even forty-five degrees below zero. Yet this patch of sainfoin has been in existence for at least fifty consecutive years and is said to resist winter injury better than alfalfa.

Possibly its survival is partly due to the fact that it is not usually cut for hay until the seed is well set and partly ripe, with the result that some seed is shattered and later rains develop the new plants. Casual inspection would show that field is composed of about equal proportions of new and old plants. Its chief value to the beekeeper is in the fact that it helps fill the gap between dandelion and clover and alfalfa, and the bees surely do swarm upon a field of sainfoin in bloom.

G. F. Pearcey,
British Columbia.

Queen Supersedure in Package Bees

By A. V. Dowling,

Secretary Southern Beekeeping States Federation.

SUPERSEDURE and queens disappearing is one of the biggest problems in shipping and establishing package bees.

For the past three years I have talked and corresponded with bee shippers, apiary inspectors, northern honey producers, bee laboratory and journal officials, on the subject of queen supersedure and queens disappearing. After obtaining all the information I could, I am submitting same in hope it will give a better understanding of the subject. Please remember that the information in this article was given to me by outstanding beekeepers of the United States and Canada and are not my own ideas, nor is this article submitted for the sake of argument.

The following reasons have been given to me as the cause of supersedure or a queenless condition and they may be placed in three divisions, namely: shipper, buyer and transportation.

1. Small mating boxes cause cells to chill in cold weather and overheat in hot weather.
2. Queens shipped from small mating boxes before their laying qualities are fully developed.
3. Queens shipped from large mating boxes are injured, because they are stopped from laying too suddenly.
4. The feeding of sugar syrup instead of honey syrup to cell finishing colonies.
5. Confining of queen too long a time before introduction.
6. Grafting from a queen that is too old or too young or one that is being superseded.
7. Bee balling, or clustering, on the queen cage in the package, thereby overheating her.
8. The sudden change of temperature, hot to cold, after installation.
9. Dwindling of bees in a colony established with a combless package.
10. A shortage of pollen when bees are established on foundation.
11. The feeding of soured syrup when establishing a package colony.
12. The sudden stopping of a heavy honeyflow.
13. Opening the hive too soon, or too often after a queen is introduced or a package is established.
14. Incorrect manipulation of frames of brood.
15. Queens overheated in mailbags, and packages overheated in transit.

Reasons one to seven may be caused by the shipper, nine to fourteen by the buyer, and fifteen by transportation.

I do not know how many of reasons one to fifteen will cause supersedure, but I do not believe any of them can be depended upon to cause supersedure regularly, although there is no doubt a number of these will cause queenlessness. Reports indicate that a large per cent of the supposed supersedure is not supersedure but a queenless condition.

Both shippers and buyers report a smaller amount of trouble in comb packages than in combless packages. Experiments in loose queen combless packages, for the past two years, indicate that the percentage of trouble in this type package is as small as in the comb package.

Beekeepers that truck their bees, instead of shipping by train, report they also have trouble with the combless package, so we cannot blame train transportation entirely.

Shippers report that a large number of queens disappear from mating boxes in the spring if it suddenly turns cold for a few days, and especially during a continued cold and rainy spell. It seems only logical that the same conditions could exist after packages are established in the North.

The system used in rearing queens should not take all the blame, as queens shipped in comb packages and loose queen packages give much less trouble than queens shipped in the combless package. Most queens reared by shippers are produced under the same conditions.

Shippers report that they have shipped one hundred queens, all grafted, reared, packed and shipped under the same conditions, fifty to one party and fifty to another. As the one party had a large percentage of trouble and the other none, it does not seem fair to blame the shipper for all the trouble. But they often get the blame and in many instances are asked to replace losses for reasons that are beyond their control.

There is no doubt that some of the trouble is caused by inferior queens shipped from the South, and there is no doubt that some of the trouble is at the receiving end. The only way to solve this problem is through the cooperation of the shipper and the buyer, and I know the shippers are more than willing to do their part.

Alva Kelman's Story

This picture contest of ours gets more and more interesting, Alva Kelman, of Arlington, Kansas, sends us these pictures. He says the pond is where his bees water and in the background are willow trees, which, in the spring, yield a large amount of pollen. He also shows, down in the right corner, a field of buckwheat which he himself planted for bees. The beehive is the first swarm of bees he owned. He made the cover himself. Then, under Alva's picture, is a young pear tree in bloom. He took these pictures within a radius of a half mile of where his bees are located on his father's farm. Alva is fourteen years old. Now, who can beat that?

He says: "In the fall of 1935 I became interested in beekeeping. I found a swarm in an old house. I had to go to a 4-H club meeting the next day and when I got back my older brother had taken the honey from the bees, but the bees themselves were still there. I soon found a large bee which I thought was the queen. I put it into a hive and shook most of the bees on the floor, but instead of going in, they went out of the house settling in the top of a large cottonwood tree. I had picked a drone.

"But my enthusiasm was good. In the fall of 1936 I read a number of bee books and had supplies bought by the 1st of March, and secured package bees. I went through various experience, but yet I got about 200 pounds of honey. This picture of myself was taken at the time I graduated from the eighth grade!

[Good boy, Alva! Success to you!—Ed.]

ABJ

A Wood Preservative for Beehives

By L. A. Harcourt,

England.

MOST beekeepers will be overhauling their equipment and probably assembling new hives soon and in this connection many must long have wished for a good wood preservative superior to paint, creosote or similar tar products. The writer has found Cuprinol, a preparation of metallic salts of zinc and copper, to be satisfactory.

When paint is the preservative used, an annual coat is necessary in addition to the first two coats if the woodwork is to last; and spare hives are not available in which to transfer bees before the repainting is done. Of course, some beekeepers paint hives while they are stocked with bees, but this is a shifty way. Again with paint only the outside of the hive is proofed. With creosote, hives must be left untenanted until the tar smell is gone which may take some months. Otherwise, the hive may be vacated by the bees on account of the objectionable odor. But the

chief drawback to the use of creosote is the tendency to mask the distinctive odor of the colony and thus bring about robbing, one of the worst troubles of the beekeeper. Futhermore, an annual application of creosote is advisable.

Now, with Cuprinol the smell quickly disappears if the hive is exposed to the air for a few days and the bees do not object to occupying a freshly treated hive. Neither are there any signs of robbing as sometimes occurs with creosote. The honey is not tainted when supers treated with Cuprinol are in use.

The great advantage, however, is that the initial application provides a lasting protection and saves annual recurrent work and disturbance. It is applied both to the inside and outside of the wood and after the top has been treated, I give the metal a coat of white paint on top of the cover to preserve it and also to make a cooler cover. The underside of the floor board is also given a black coat of bituminous paint after the Cuprinol has dried in.

The advantages of this product, according to the manufacturers, are that:

a. It penetrates deeply without heat or pressure.
b. It does not bleed.
c. It can be painted over.
d. It will not wash off or evaporate.
e. It retards the expansion and contraction of the wood.
f. It primes and protects in one application.
g. It will not corrode iron nails.
h. It prevents decay.
i. It is clean and harmless to use.
j. It is a powerful insecticide and fungicide.

I use standard, light brown Cuprinol, applied with a 2 inch paint brush, but there are also green and colorless grades. Hives are given one application. It cannot be applied over paint, however, which must be removed. In this country the produce is distributed by Messrs. Cuprinol, Inc., 1190 Adams Street, Boston, Mass.

—ABJ—

Handling Cappings

By Penn G. Snyder,

Ohio.

A. G. Woodman gave us some interesting figures in his article "Handling Cappings" on page 369 of the August number. However these figures could be analyzed a little more and they will paint a clearer picture.

Lot No. 1 gives us the following figures: 120,000 lbs. of extracted honey with 5,610 lbs. of dry (?) cappings.

From these cappings 3,120 lbs. of honey was secured; 1,875 lbs. of beeswax; 615 lbs. of slumgum; total 5,610 lbs.

Taking these figures we find 1/38 of the entire crop was in the so called "dry" cappings; this was about 2⅝ per cent.

Lot No. 2 gave us these figures: 45,000 lbs. of extracted honey with 1,202 lbs. of dry (?) cappings.

From these cappings 502 lbs. of honey was secured; 583 lbs. of beeswax; 117 lbs. of slumgum; total 1,202 lbs.

Following the above we find here about 1/89th of the crop which was about 1⅛ per cent.

Lot No. 3 gives the following: 11,000 lbs. of honey with 433 lbs. of cappings.

From these cappings 237 lbs. of honey was secured; 131 lbs. of beeswax; 65 lbs. of slumgum; total 433 lbs.

237 lbs. of honey recovered is about 1/46th of the crop which is about 2.3 per cent.

Taking a total of all honey and beeswax we find they total very close to 1½ per cent in weight of beeswax to the 100 per cent honey extracted.

Naturally this will vary more or less with the season and method used as well as with the bees themselves. If 8 frames are used in a 10 frame super you will secure more capping wax than if 9 frames are used. Also when the bees build an abundance of burr comb it adds to the wax total secured.

More attention is being given to the subject of cappings and the disposal of them in the past few years and this is showing up in the improved capping melters which benefit the entire industry.

—ABJ—

Here You Are, Alice Anne

G. M. Ranum, of Mount Horeb, Wisconsin, sends these two pictures of his little granddaughter, Alice Anne Johnson, at four years of age. She lives in the city but spends most of the summer on the farm and finds it very interesting. She has been watching for these pictures in the Journal for some time. They are both of Alice Anne taken at different times. In one, holding the smoker, she is as a little boy, helping grandfather with the bees. In the other you can see that some of grandfather's bees were not kind to Alice Anne. Grandfather says: "The picture with the smoker shows Alice Anne a few days after the effects of the sting had passed away. She was not afraid to go back again."

[That is the way beekeepers are made.—Editor.]

Snug, With a Windbreak

Dwight Woodworth, Geneva, Ohio, has his bees well protected for winter; not only well packed with leaves, shavings and slaters' felt, but note also the windbreak made by tying corn stalks on wires; and the privet hedge, which, in two or three years, will probably take the place of the corn stalk windbreak. The picture also shows the house, workshop and barn.

—ABJ—

Why Some People Cannot Eat Honey

By W. C. Moon,

Illinois-

I have read several comments on this subject and most of the commenters seem to be guessing.

A few years ago there was a man living here who could not eat Irish potatoes. His wife thought it was just a notion, so one summer when they were farming she had green peas and new potatoes in a separate dish upon the table, and her husband did not know the potatoes had been cooked with the peas.

The man came in and had his dinner, eating of the peas, but as usual he did not partake of the potatoes. After dinner he went back to plowing corn, but had been in the field only a short time when he became ill and nauseated, and vomited up his dinner. Being a strong, healthy man, he could not imagine what had made him sick. But his wife knew the cause, when he told her that evening of his sickness.

I know a neighbor woman who cannot eat sweet potatoes, or anything that has been cooked in the same kettle the potatoes were cooked in, unless all traces of the sweet potatoes have been thoroughly removed.

Most people know of someone who cannot eat certain things, because they make them sick. I have had a number of people tell me that they could not eat honey without it causing them to have cramps in the stomach.

A neighbor once told me how honey affected him that way when he was a boy, and how a German lady had told his mother to place the comb honey in a basin and heat it till the wax was all melted and then upon cooling, it would be edible without the sickening effects. He had eaten such prepared honey without the usual cramps, and eventually got so he could eat honey that was not thus treated, without the old cramping distress. While this method may not be infallible, I have tried it on a number of people and so far have not had a failure.

There seems to be some substance in raw honey that affects some people's stomachs, which the application of heat either removes entirely or changes the nature of. I believe that if this harmful substance is finally discovered and analyzed it will have to be done without the use of heat.

I have also been told that milk will relieve cramps in the stomach caused by eating raw honey, the milk being seemingly an antidote for that certain harmful element which as yet has not been satisfactorily diagnosed.

Also a Honey Baby

F. W. Walrath, Cedar Rapids, Iowa, sends us a clipping from The Cedar Rapids Gazette of Joan Peeper, which appeared in the Gazette under the title "Honey Baby in Action" with a write-up by Alice Davidson. We quote, as follows:

"Joan Peeper, eldest daughter of Mr. and Mrs. Roy Peeper, of Elgin, has been eating honey ever since she was three months old in her milk mixture, on her custard, on cereal, on bread and even in her graham crackers. And she still eats it with gusto!

"Joan, bright blue eyed, is as sweet as the honey which has been prominent in her diet. She hasn't been sick a day since she was put on her bee fruit routine.

"Born in the University hospital in Iowa City, Joan weighed only 4¾ pounds and had to be kept in an incubator. She did not gain weight, so when three months old, the mother's milk was supplemented by a mixture prescribed by Dr. C. C. Hall, of Maynard. Joan's grandmother, Mrs. Dow Peeper, a beekeeper for sixteen years, suggested the substitution of honey for sugar in Dr. Hall's formula. The doctor endorsed the change and Joan thrived. When she was 7½ months old, she weighed 15 pounds. Pictures of her were exhibited at the Iowa State Fair entitled "Honey Baby." She was then chubby and rosy, and still is healthy and pretty."

We are indebted to The Cedar Rapids Gazette for the loan of this picture and for the permission to quote from the staff article by Alice Davidson.

How to Make a Carbolic Screen

I have carbolic screens that work like a charm. They are made with a rim of three quarter inch lumber wide enough so they cover both eight and ten frame hives. On the under side I tack screen wire to keep the bees from walking on the carbolic cloth. On the upper side is a cover of one thickness of cheesecloth or muslin on which to pour the acid.

When I pour acid on the cloth I lean the frame against the hive at a slant, cloth side up, and run a streak of acid across the top edge, down each side edge and one down the middle. Then I pick up the frame, give it a swing or two sidewise to spread the acid over the cloth and stop any drip.

If the weather is warm, the frames work fast enough, so two or three are all you need to take off a load of honey.

John Bruce,
Illinois.

—ABJ—

A Problem in the Northwest

Natt Dodge sends this picture of Julian Joubert in Washington getting ready for the bear that has kept him awake, while bruin sought the sweets he craves. Several bears have been caught in this trap. They smashed his hives, scattering bees, combs and frames about in the hasty search. Bears are sometimes a problem also in the Southwest and in the north central states.

A Winter Mantle

The picture was taken in the winter of 1937. Later flood destroyed twenty-six colonies for me. Every hive in the row showing was carried away, twenty-seven in all. I hived a few and am building up again. One colony upstairs in the house filled 167 sections of honey even in a dry year. They had good flights on Christmas Day and the day after.

Edward N. Marsh,
New York.

—ABJ—

Value of Winter Packing

Winter packing is of much value to us in both mild or severe winters. When we look the bees over in the spring or go through colonies at the proper time after unpacking, we want to see a colony of bees, not a two or three-comb nucleus. We do not want wet, soggy bottom boards filled with dead bees, moldy combs, mice nests, etc. It takes a little more labor and cost for packing and material, but it is worth it.

In the season of 1937 my colonies made a surplus of 65 to 70 pounds where a neighboring beekeeper secured nothing. It couldn't be all accounted for, though in better packing. The real test was in 1935-36 with the worst winter we have ever had. With 205 colonies, we had 60 packed without any loss, and the balance unpacked with a loss of 85, which was enough of a jolt to set one to thinking whether to stay in the game or get out.

So, if we want a crop of honey, we pack. If we want half a crop, we don't pack. Then, if we have a weak colony in the spring, they must be requeened, since the chances are they are not good winterers, and they must not be carried through another winter. Even if they are good honey gatherers, they must be out of the picture.

Some are trying packages instead of packing. We do not know much about that but we have doubts. To replace those 85 colonies we lost was pretty dear. Packages may be a substitute for packing, queens can be removed after the main flow, and the bees disposed of in the fall, thus saving the honey they might consume; the hives may be stored out of weather, and packages ordered in time to get good service. Then we can perhaps toast our shins by the fire and save our worries and our labor during the balance of the season.

With an ideal location down in some hollow with plenty of windbreaks on all sides with good tough native bees, it may be possible to make a good showing without packing. Other bees in other situations, however, will require the use of some protection.

Alfred P. Johnson,
Illinois.

The Editor's Answers

Declaring Bees a Nuisance

A beekeeper here in town has suggested I ask your advice with reference to a warrant which has been issued against the keeping of bees in the city limits. The neighbor complains although I have done everything possible to make it so the bees could be kept on my place. Would appreciate your opinion. ILLINOIS.

Answer.—You send, with your question, a copy of the City Ordinance passed in 1933 forbidding the keeping of bees in the limits of your town. A municipality may not forbid the keeping of bees within its limits and no city may declare that bees are a nuisance when they are not a nuisance under any and all circumstances. Whether keeping bees in the city is a nuisance depends on each particular case and must be determined in each case. This has been definitely settled in the case of the city of Arkadelphia versus Clark (1899) 52 Ark. 23, 11 S. W. Rep. 957, 20 American Statistical Report 154.

Present this information to your City Council in the proper manner. Our opinion is that the Ordinance passed in 1933 could not be enforced.

The question as to whether the bees are a nuisance is a different matter. If your neighbor can prove your bees are a nuisance and the case should be presented to the city and the bees declared a nuisance, you would have to move them. Your best possibility is to arrange the matter with your neighbor if possible. If conditions are such that no satisfactory agreement can be made with your neighbor, the best way would be to hire a lawyer and have him submit your case to the City Council.

—ABJ—

Moths in Comb Honey

I have section honey and I notice the work of wax worms along the edges of the sections, although I haven't seen any worms. I took the supers from strong Italian colonies with carbolic acid and placed them upstairs where I thought moths would not get at them. I don't like to box it up for sale for fear they will be found by the customers, or that later these worms may grow into larger ones and I wouldn't want any of my honey on sale in that condition. Please tell me what to do so I may safely market my comb honey. WISCONSIN.

Answer. Often, moths lay eggs in and around comb honey even after it is taken from the hives. The little tunnels you see are the work of the first small worms which have hatched from the eggs deposited by the moth. They will grow as large as their food supply will allow and may, as you say, damage your sections or they may be unsalable because of the presence of worms.

The honey can be fumigated in several different ways. Sulphur is often used, burning it below the sections and then airing the honey and putting it away where moths cannot get at it again. The usual bee moth fumigant, paradichlorobenzene, furnished by bee supply houses, is also good for fumigating. When using it, keep a jar or cup of the fumigator where the honey is stored, in a moth-tight place. Carbon bi-sulphide is also used and directions for using it are given on the can when it is obtained from the druggist. It is highly inflammable the fumigating must be done where there is no fire. It is quite effective.

—ABJ—

Sorghum or Cane Syrup For Fall Feed?

Will sorghum or sugar cane syrup make good feed for bees? There is plenty of it in this district. ALABAMA.

Answer.—We advise aganist the use of sorghum or cane syrup for feeding to bees in the fall. The bees are confined to the hive for long periods during the winter months and this kind of food is dangerous as there is so much waste in it. Better use commercial sugar.

—ABJ—

To Keep Wax from Cracking

How can I keep cakes of beeswax from cracking when they are molded in pans two inches thick. ALABAMA.

Answer.—Let the beeswax cool very slowly and you will not have cracking. When it is put in the pans, set them in a closet or in a warm place where the cooling will take place slowly. Cracking occurs because the wax cools too quickly.

—ABJ—

Honey Production From Queenless Package Bees

Can you give me the probable results of three pounds of bees, without a queen, put in a hive July 2, at the beginning of sweet clover, and left until August? Will they gather honey? SASKATCHEWAN.

Answer.—The difficulty with three pounds of bees in July carried through a flow, is that the colony would probably not start storing. The queenless colony, since the colony has no queen, would likely also dwindle or swarm out. We think the best way is to buy queenright packages and remove the queens the middle of July until the end of the honeyflow.

—ABJ—

Beekeeping and Baking Compared

Some time ago a baker told me that baking is more complicated than beekeeping, but I argued it was the opposite. He learned his occupation, working under experienced persons, I worked for years alone to learn to produce honey. What do you think? OREGON.

Answer.—It would be hard to answer this question without accurate comparisons. Since we know nothing about baking, we are in no condition to do this. Your baker friend should take the same attitude about beekeeping. The other man's occupation is always easier than ours.

To become a baker without the help of an expert, would probably require a lifetime of effort and might be practically impossible. I wonder if a man could become a successful beekeeper, however, if he did not have the help of books and other publications to guide him?

—ABJ—

Caucasian-Italian

I have been trying Italian and Caucasian bees for honey production and I have noticed a difference between them, but haven't had Caucasians long enough to note many differences. I wish to experiment with Italians, Caucasians and Carniolans. What do you think about them? OREGON.

Answer.—We have had several hundred colonies of Caucasians. In some future time we may use them again, but at present, we prefer the Italians because here, in the central valley, the Caucasians pick up so much propolis, they increase the working time in the apiary and cause the destruction of considerable equipment which is glued so fast together it cannot be taken apart.

We know little about Carniolans, but what experience we do have shows that they might prove to be excessive swarmers, without very careful management. This would be particularly true in outyard operations.

—ABJ—

Disposing of Bees in the Fall

How do you kill bees so as not to damage the honey? OHIO.

Answer.—We regularly use cyanogas, a commercial product, which may be obtained through your druggist. It is extremely dangerous and will cause death if inhaled freely, so it should always be used in the open. The fumes of the gas, however, will not damage the honey. If it is aired freely for a few days, there is no danger. The gas quickly escapes and after a few hours the remaining material is harmless.

—ABJ—

Transferring From Modified Dadant Hives

How shall I use 10-frame hive bodies on the Modified Dadant? How shall I transfer bees from the 10-frame to Modified Dadant? KANSAS.

Answer.—The 10-frame hive body is used as a super on the Modified Dadant hive by nailing an inch strip of wood on each side of the bottom edge of the smaller body to make it the proper width to fit on top of the Modified Dadant.

If you do not wish to use the 10- or 8-frame hive bodies as supers, the best way to transfer is to take combs from the small hive and put them directly into the Modified Dadant. You will, of course, have shallow combs then in the larger hive but you may fill out with frames of foundation of regular Modified Dadant brood size and the small frames may be worked to the sides and finally removed, or later lifted above a queen excluder until all the brood is emerged from them when they then may be used if you wish in supers or discarded. This is a gradual process but quite easy to do.

A quicker way is to shake all the bees including the queen off of the smaller combs of the 8- or 10-frame hive body into a

Modified Dadant hive with full sheets of foundation; place an excluder above the Modified Dadant and set the brood in the 8- or 10-frame bodies on top until the brood has emerged. This is really a shook swarm, but with honey coming in, it is a quick way to transfer. This should be done as early as possible in the season.

—ABJ—

Keeping Honey Liquid

We manage our bees for both comb and and extracted honey, and would be pleased to learn how extracted honey is processed to keep it from granulating for a reasonable time when packed in one pound containers.
INDIANA.

Answer.—The secret of having your extracted honey packed in jars and processed so as to keep it from granulating consists first in proper filtration and straining, and proper heating and packing.

Perhaps for your use in a small way thorough straining of the honey through fine cheesecloth or flour sacking so as to remove all impurities and any possibility of granular particles of honey which are apt to cause granulation, would be sufficient.

The honey should be heated as rapidly as possible to a temperature of about 160 degrees and then packed in he jars while hot. The jars should be carefully sealed so as to exclude all air.

—ABJ—

Cutting a Bee Tree

Has a man a right to cut a bee tree and de-troy the bees? Is there a fine for cutting bee trees? ILLINOIS.

Answer.—Ordinarily, a swarm of bees belongs to the one who follows the swarm. In other words, if a swarm comes out of your colony and goes to a neighbor's and you have followed it there, you have the right to claim it provided you do not destroy the property of your neighbor in so doing. The bee tree, however, is the home of an established colony and so belongs to the one who owns the property and no one has the right to cut the tree without the consent of the owner. It is done, but one is liable to prosecution if the owner has a mind to prosecute. The amount of the fine for the offense would be up to the judge but there would no doubt be a fine for cutting a tree on another man's property without permission.

—ABJ—

You Can't Do That Here, Mister

FROM time to time I have read articles in the bee journals by men whose practices make me wonder. I don't see how they get away with some of their methods. Some of these are: placing colonies in the yard in pairs, side by side; piling up supers wet from the extracting room for the bees to clean out; indiscriminate mixing of supers when supering up in the spring; giving stores from one colony to another.

Placing colonies side by side is simply inviting European foulbrood to scatter by means of drifting nurse bees. Heaping up wet supers in the yard is a wonderful way to scatter American foulbrood all through your colonies. The same can be said to a lesser degree by giving one colony a super from another in the spring or at any other time for that matter. Ditto for transferring stores from colonies well supplied to those that are short.

I don't do any of these things. My colonies are set at least six feet apart. I never leave a single drop of honey where the bees can get it.

If I should spill a drop or so on the ground when going through a colony I carefully bury it under plenty of soil. Every colony has a number in my yard and every super has the same number that goes with the colony. They are never mixed. Whenever a colony is short of stores I feed it sugar syrup. I intend to continue these methods.

There are three principal reasons why we have plenty of both brood diseases in western Oregon and why we are gonig to continue to have them for many years. Lack of funds for adequate inspection is one reason. The last legislature made some provisions to remedy this but it is very inadequate yet. You can't expect an inspector to spend all of his time with the bees when he isn't paid enough to live on. He must have other employment. They have far more territory to cover than they can hope to get to even once a season. The second reason is, too many ignorant and careless beekeepers. The county inspector tells me that the migratory men scatter foulbrood worse than any other beekeepers. Maybe so, he ought to know. He tells me that the back lotter can leave his bees out for years and never have any trouble. I don't agree with him on this point at all. I have burned too many of these kind of hives when moving into a new district. And I have seen many more that should have been burned. Some of these back lotters —most of them I might say—don't do anything with their bees at all. They sit them out and never touch them. Some of them have complained to me that their bees swarm too much. Others don't know why they raise "bees instead of honey." I don't know what can be done about this situation until more funds are available for better inspection service. The last reason is likewise one that will remain constant for a long time to come. Western Oregon is still pretty well timbered. That means plenty of bee trees and the foulbrood that goes with them. Each apiarist needs to work his territory and destroy all these colonies.

As long as there is so much foulbrood in my locality I am going to continue the careful methods I have outlined to you. How do you fellows who practice the methods you have written about get away with it? Don't you have foulbrood? You can't do that here, mister. Not if you want to stay in business.

Harold Luckner,
Oregon.

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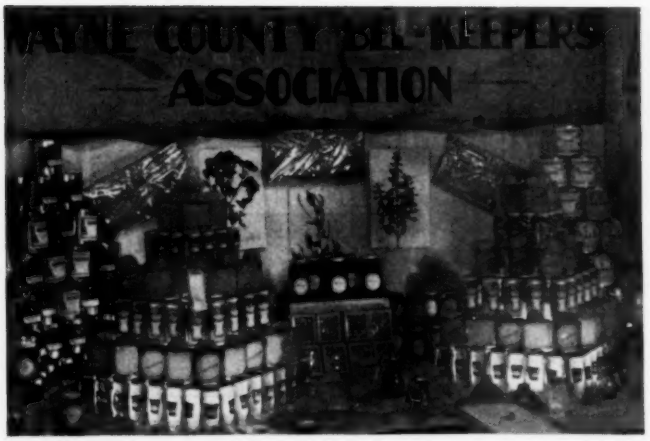

Exhibits and Demonstrations At The Michigan State Fair

At top, a partial view of the Wayne, County Exhibit. Second, Mrs. Ruth Hoover, food demonstrator at the Michigan State Fair Honey Exhibit. Third, live bee demonstration booth. Bottom, Walter E. Becker putting on a hatful of bees, inside the booth, of course (Photos by Robert Savallos.)

By far the greatest and most successful state fair in the country this year, the Michigan State Fair included a large and well organized honey exhibit under the supervision of R. H. Kelty, of the Michigan State College of Agriculture. The exhibit included live bees and bee disease demonstrations, and a department of food preparation, under the supervision of Walter E. Becker and Mrs. Ruth Hoover, respectively. The display and room occupied were larger than in any previous year, and the attendance unusually large.

— o —

Program for Beekeepers at Agricultural Conference, Purdue

January 10-12

Tuesday, January 10, 9:00-12:00—Trends in Indiana Beekeeping—James E. Starkey; The Life of the Bee Elwood Montgomery; Swarm Control—C. L. Farrar. 2:30-4:00—The Place of Beekeeping in Indiana Agriculture; Production of Comb Honey—C. L. Farrar; A New Generation of Beekeepers—G. E. Lehker.

Wednesday, January 11, 9:00-12:00—The Growing Recognition and Use of Honey—Aneta Beadle; Marketing Indiana Honey; A Program of Beekeeping Research for the Central States—C. L. Farrar. 2:30-4:00—Handling and Storing Honey—L. R. Stewart. Management During the Honeyflow—C. L. Farrar. Questions and Answers.

Thursday, January 12, 9:00-12:00—The Wintering Problem in Indiana; The Disease Situation—J. E. Starkey; A Program for Disease Control.

— o —

Manitoba Short Course January 16-17

Prof. A. V. Mitchener, of the University of Manitoba, announces the annual beekeeping short course from January 16 to 27, with Prof. A. V. Mitchener and Provincial Apiarist, L. T. Floyd, as lecturers. About fifty lectures and demonstrations will be given covering practical beekeeping; how to begin, extracted and comb honey production, seasonable management, swarm control, queen-rearing, requeening, feeding, use of package bees, marketing honey, bee diseases, honey plants and relation of bees to fruit growing. About eight other speakers from University departments will also take part in the course, and during the last week members of the Manitoba Association will meet for two days in their annual convention, so students will also have an opportunity to meet the leading beekeepers of the province. Registration, $5.00. Board and room at the Manitoba Union, University Residence, $6.50 per week.

A Kentucky Demonstration

May 14th, at my apiary, Aberdeen, Kentucky, a crowd turned out to see and learn from doing things with bees. Our people like to learn that way. We had no honey from the fall flowers in 1937 and little this year until July. I never saw white aster fail to give a good flow before. Red bud and tulip poplar were killed by frost and then we had too much rain. Before July three-fourths of the bees alive in April were dead from starvation. Prickly ash is now in bloom and will tide the bees over to sourwood.

I. V. Evans,
Kentucky.

—ABJ—

Ohio Beekeepers' Winter Meeting

The Beekeepers' Short Course and the Annual Winter Meeting of the Ohio Beekeepers' Association is scheduled January 31, February 1 and 2 of Farmers' Week at the Ohio State University.

Extensive plans are being made for the educational program. The State Association is providing ample time at their business sessions to cover important problems confronting the bee industry.

W. E. Dunham, Sec'y.

—o—

Bronx County Association

The Bronx County Beekeepers' Association will hold its annual Christmas party on Sunday, December 4, at 3 P. M., at the home of Gus Flother, 1369 Fulton Avenue, Bronx, N. Y. Everyone attending brings a package not to exceed ten cents in cost, and everyone receives a package from Santa's bag. As each person must open his package there is much merriment and laughter.

The social gathering takes place on Saturday evening, December 10, at 8 P. M., in the club rooms of the Senator A. C., 2212 Haviland Avenue, Bronx, N. Y. A fine social evening is guaranteed.

Adolph Loehr, Secretary,
210 Betts Avenue, Bronx.

New Portland (Oregon) Association

A new beekeepers' organization known as the Portland Beekeepers Association has been formed at Portland, Oregon. It is a branch of the Oregon Beekeepers Association and its members will be drawn from Portland and the surrounding area. The officers for the first year are Chas. H. Hayes, president, H. J. Moulton, vice-president, Rachel Hartwig, secretary-treasurer.

The object of this association is to develop and promote beekeeping by education, cooperation or any other efficient means. Inquiries to the secretary at 901 S. W. First Avenue, Portland, will be welcome.

Rachel B. Hartwig,
Secretary-Treasurer.

—o—

New York Meeting a Success

About sixty interested members and friends of the Rockland and Bergen County Beekeepers attended the meeting at Lakeside Farm, Gould Foundation, Spring Valley, New York, on Saturday, November 5.

Mr. Wm. S. Clark, Farm Bureau Agent of Rockland County, introduced Prof. Geo. Rea, of Cornell University, who in his usual incomparable manner, gave an excellent demonstration of winter packing, explaining carefully, each step and its purpose. In spite of the spring-like

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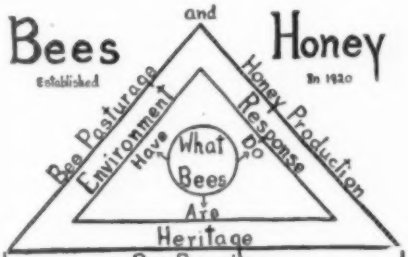

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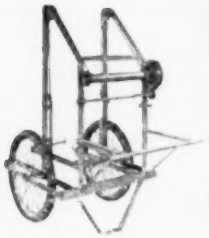

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weather, the bees seemed very inactive and ready to cluster for winter warmth.

Winter packing not only preserves the winter stores of honey, but insures a strong, vigorous colony for fruit blossom pollination in the early spring.

Following a short business meeting, a 16-pound turkey was raffled off, and the winner found to be Mr. Henry Behnke, a New Jersey State Farm Supervisor, and a member of our organization.

Cider, donated by Mr. Hopf, and doughnuts of a special honey-baked mixture, proved to be a real satisfaction to all.

John F. Hopf, Jr.
Secretary.

—o—

Dubuque (Iowa) Officers

Fabian Beckett, Dubuque president, might be able to tell smiling Secretary Dietrich where to head in. As it looks, Dietrich is planning something. The sixty who picked them at Eagle Point Park, last June should look ahead to pleasant times. This association knows how to stage a party. They had races, games, eats, talks, contests. That's what it takes

C. J. Dieterich, Dubuque secretary

to get the crowd. N. E. France, veteran Wisconsin beekeeper and former state inspector, was the star speaker. Newton Boggs, of Viroqua, Wisconsin, did his share too.

Boggs tells of the Wood two-queen system for comb honey production which consists of raising the brood and queen to the top above an excluder. A green queen cell is given to the lower body. When the lower queen is well established, the top body is shaken below, forcing the bees into the comb honey supers.

F. B. Paddock championed the bee on the farm. "When beekeepers think the prime reason for bees on earth is to make them honey, they

Fabian Beckett, Dubuque president

are just 4 per cent wagging the other 96 per cent as Roosevelt says of business minorities. The prime reason for bees is their own existence, which has resulted in plant pollination."

—o—

Oklahoma Has New Association

The beekeepers of Oklahoma met at Muskogee, Oklahoma, October 5th, and organized a state beekeepers association. D. W. Darrow, of Muskogee, was elected president; Edwin A. Smith, Woodward, vice-president; S. E. Hale, Muskogee, treasurer; and J. M. Goin, Oklahoma City, secretary. Mr. Goin is now chief bee inspector for Oklahoma.

The meeting was well attended from all sections of the state and there was a great amount of interest. The association is busy organizing local associations to be affiliated with the state association. The association plans to ask the next session of the legislature to amend state laws in order to clarify present laws and facilitate inspection of bees for the control of disease.

The meetings were held in connection with the Muskogee State Fair which had one of the largest and best honey exhibits Oklahoma has ever

produced. Several thousand pounds of honey was exhibited. D. W. Darrow, president of the State Association, with the aid of Baughn Stone, inspector, gave a live bee demonstration each afternoon at 4 and evenings at 8. These demonstrations were well attended since Mr. Darrow dressed in bathing suit, poured bees over his body to the amazement of everyone.

J. M. Goin, Chief
Inspector Bee Bureau.

— o —

Rawson New Illinois President

O. G. Rawson, East St. Louis, became the new president of the Illinois Association in the convention at Springfield, November 11-12. I. C. Evans, Decatur, is First Vice-President; Willard Smith, Monticello, Second Vice-President; Walter Duckwall, Jacksonville, Third Vice-President; R. M. Gober, Dixon, Fourth Vice-President; Roy Baxley, Christopher, Fifth Vice-President; Hoyt, Taylor, Pleasant Plains, Secretary; and Wesley Osborn, Hillsboro, Treasurer.

O. G. Rawson, new Illinois president (Photo by Taylor)

In later numbers, summaries of the presentations will be given. The banquet was exceptionally well attended with fine entertainment. The colored moving pictures of bees, flowers, brood and honey, shown by Huber Root, were the high points of the evening.

An outstanding exhibit of foods containing honey drew the attention of most of the 150 members attending the meeting. Mrs. Gill had an ex hibit of cookies from recipes of foreign lands. We hope to publish the recipes later.

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Crop and Market Report

Compiled by M. G. Dadant

For our December Crop and Market, we asked reporters to answer the following questions:

1. How is honey moving?
2. What proportion of crop is out of beekeepers' hands?
3. How are prices retail?
4. What is jobbing price on comb? Extracted carlot?

How is Honey Moving?

In spite of unseasonably warm weather and the fact that conditions were not as satisfactory as a year ago, honey has been moving comparatively well. In fact, we would say honey has been moving decidedly well, in view of the heavy crop.

This is particularly true in the New England states where there has been at least average movement of honey. Generally, the retail movement of honey has been entirely satisfactory but the jobbing movement has not met with the approval of all of the beekeepers. This is owing to the fact that the heavy reduction of honey this year, throughout the Central West particularly, has created almost a glut in the market which could not find absorption as readily as could a smaller crop.

Movement of honey is slowest, we believe, in the intermountain section and most rapid in the New England states, New York and along the Atlantic coast, extending across the southern part of the country. We believe that in Illinois the movement of honey has been as good as, if not better than usual at this season of the year.

Per Cent of Crop Sold

While many are reporting only 15 per cent of the crop sold, we believe that half of the honey, at least, has moved out of the producers' hands and this is again true, particularly in the eastern sections of the country. Even in the Central West, the movement has been satisfactory and it has been also in the southern states where more than 50 percent of the honey is now out of the hands of producers.

Again we find the slowest movements in the intermountain area, largely caused by the fact that intermountain honey has had much difficulty in competing with that of the Central West, owing to the much lower transportation rates on central western honey to the central markets. In fact, this year in the Central West probably more honey has been moved to market by truck than ever before.

There has been a general tendency on the part of beekeepers not to sell at sacrifice prices, although we learn of many sales which, we are sure, are far below the cost of production.

We believe the first phase of the distribution of the 1938 crop is now past. Most of the distressed honey is out of the way and many of the larger producers have located their honey. It is true that packers are likely pretty well filled up with honey at this date, but allowing for a satisfactory holiday movement, by the beginning of the year they should again be in a position to purchase and some of the slack created by the heavy crops should be taken up.

The Canadian provinces show conditions similar to those in the United States except that British Columbia seems to have a satisfactory crop and is moving it out on a satisfactory basis. They do not have the difficulty of heavy transportation charges.

Prices Received

We may say that retail prices are somewhat lower than a year ago although many beekeepers in scattered sections of the country everywhere have been maintaining 1937 prices so far in 1938.

Such reductions as have been made have been from 10 to 15 per cent below last year and have been caused largely by price cutters who were endeavoring to dispose of their honey through retail channels and at carload jobbing prices. In the eastern areas we find 5-pound pails of honey selling at 60 to 75 cents and 10-pound pails at $1.25 to $1.50, but in the Central West, the price is somewhat reduced over this, 5-pound pails selling at 45 to 60 cents and 10-pound pails at 90 cents to $1.25.

Prices are proportionately lower in the intermountain section, although probably there is not as great a discrepancy there between this year's and last year's retail prices as there is farther east.

Some reporters estimate that the retail prices are 1 cent per pound less all around than last year, while others estimate 10 percent to 15 percent, which is practically the same thing.

Jobbing Prices

There is a fair uniformity in the jobbing price of comb honey, although we learn of some No. 1 honey selling at $2.50 per case. The usual price in the West is $3.00 per case with 50 cents to $1.00 more per case as you go on eastward.

In a jobbing way, extracted honey is not moving at any great pace at 6 cents per pound. Some considerable quantities are moving at 5½ cents, f. o. b. shipping point, in central western sections, but the bulk of it probably at 5 cents and some at 4½ cents f. o. b. shipping point, usually with containers furnished. We learn of one California beekeeper selling as low as 3½ cents for this honey probably an amber grade, f. o. b. Los Angeles.

There is a general tendency on the part of producers to hold for something better than ruinous prices, even though the honey has to be held well into the 1939 season or perhaps over another crop year.

Five cents per pound, f. o. b. shipping point, does look like too low a price to take. However, we imagine that there are a number of producers who would be willing to sell at that figure, although the bulk of those who still hold their honey undoubtedly would want to net a better price.

With the advent of cold weather and particularly more desirable industrial conditions which are promised us, together with an almost feverish excitement on the part of beekeepers to sell their honey locally, much of the slack should be taken up and much of the surplus over 1937 disposed of by March 1 of the coming year.

Sacrifices will continue to be made, no doubt, to get ready cash, but we see no reason for receding from our position and from our recommendations as given in earlier numbers of the American Bee Journal for the 1938 fall.

Some effort has been made to get the Surplus Commodities Corporation interested in picking up a few dozen carloads for distribution to the needy and unfortunate. So far, such efforts have not been entirely fruitful.

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MICHIGAN'S FINEST WHITE CLOVER HONEY 7c; by truckload 6c. Buckwheat 5c. New sixties. No disease. You will be pleased. John McColl, Tecumseh, Mich.

WHOLESALE, Fancy and Number One Comb white; also White extracted, and Amber. Reduced prices. N. B. Querin, Rt. 4, Bellevue, Ohio.

HONEY—Fancy clover, in sixties, priced to resell at a profit. Reference First State Bank. E. M. Cole, Audubon, Iowa.

FOR SALE—Fancy extracted white clover honey in new 60's, 10's and 5's. Prices reasonable. Write needs. Sample 10c. E. J. Baxter, Nauvoo, Ill.

FOR SALE—Fine grade of white, sweet clover honey, in 60 lb. cans, two cans to case, 7c per lb. f. o. b. Dunlap, Iowa; 5 cases or more, $8.00 per case. For larger quantities write for prices. Sample 10c. E. S. Miles & Son, Dunlap, Iowa.

EXCELLENT quality heavy fancy white clover comb, $3.50 case; fancy, $3.25; No. 1, $3.00; fancy amber, $3.00; fancy buckwheat, $2.75; white clover extracted, 7½c; amber, 7c; fine flavored buckwheat, 5½c. C. B. Howard, Geneva, N. Y.

FOR SALE—Delicious water-white sweet clover honey in 60-lb. cans. Any quantity. M. W. Thompson, Toronto, S. Dak.

CHOICE NEW CLOVER HONEY in 60's and in 5 and 10 lb. pails. R. C. Bish, successor to Moore Apiaries, Tiffin, Ohio.

FOR SALE—Fancy Iowa white clover extracted honey. Kalona Honey Co., Kalona, Iowa.

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CHOICE Michigan Clover. Honey New 60's. David Running, Filion, Michigan.

HONEY FOR SALE—All kinds, any quantity. H. & S. Honey and Wax Company, Inc., 265-267 Greenwich Street, New York.

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CHOICE CLOVER HONEY in 60's. Frank Bornhoffer, Mt. Washington, Cincinnati, Ohio.

CLOVER HONEY FOR SALE. Write for prices. Henry Price, Elizabeth, Ill.

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WANTED—Carlots honey; also beeswax, any quantity. Mail samples, state quantity and price. Bryant & Cookinham, Inc., Los Angeles, California.

WANTED—Comb, chunk comb, white and light amber extracted honey. Any amount. Central Ohio Apiaries, Millersport, Ohio.

WANTED—White and Amber Extracted Honey, any quantity; also beeswax. Write THE FRED W. MUTH CO., Pearl and Walnut Sts., Cincinnati, Ohio.

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December 31 brings the final opportunity to have your name included in the 1938 Membership Directory. We urge that you make sure your contribution reaches us by this date.

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Madison, Wisconsin

My 1938 contribution of $_____ is enclosed.

NAME _____

CITY _____ STATE _____

STREET OR RURAL ROUTE _____

The Postscript

Gossip About the Office in the Making of the Magazine

Very probably many beekeepers listened to the Firestone "Voice of the Farm" program and heard the announcer tell of his visit to the Brady home farm in Minnesota. Bees were described as a principal source of income on a farm of 160 acres in a state where commercial honey production is highly developed by specialists who do nothing else, and who number their colonies by thousands in some cases. It is a source of satisfaction to know that there are still farms where bees have a place in a diversified agriculture as in the old days before specialization attained its present feverish importance.

—ABJ—

D. S. Wood, of Buckeye, Arizona, writes that in five years of observation he has not known honeybees to work on sugar beets. He says: "The plants are lousy with bugs of all kinds and every kind of fly but no bees. I don't know whether the flies and bugs keep the bees away or whether there is no honey there. There is a sweet sickening smell to sugar beet bloom that can be smelled a half mile away."

—ABJ—

Some years ago there were many prosperous beekeepers in the irrigated regions of the Rocky Mountain area who depended upon alfalfa which was raised for seed. When the alfalfa was turned under and the land planted to beets there remained nothing for the beekeeper to do but to seek new pastures. In some of these neighborhoods few beemen remain.

—ABJ—

For years past, members of this firm have spent the week-ends during the open season hunting ducks at a camp on Taylor Island in the Mississippi. Just at the opening of this year's season the camp burned to the ground. Now the bosses are roughing it in an old log cabin but they get their ducks all the same.

—ABJ—

Theo. T. Andresiak, of South Bend, Indiana, suggests the following as a slogan for beekeepers: "Eating honey will bring you health and save you money."

The beekeepers have long sought a catchy line to do for honey what the "Say it with Flowers" slogan has done for florists. Has anybody else something to suggest.

—ABJ—

Leon Newton, Nebraska beekeeper, sends a line from his winter home at Delray Beach, Florida, to say that the temperature there on November 2nd., was 78 degrees.

It so happened that it was nearly as high in several midwest localities at about that time but there was quite a different story to tell a few days later.

—ABJ—

J. J. Wilder, of Waycross, Georgia, writes an interesting letter regarding the early history of bees in that region. He questions the usual sources of information as to the origin of honeybees in America and seems to be very doubtful whether they first came from Europe as commonly believed.

Since we have no definite record of the first honeybees to be brought here there is always room for some argument as to when and from whence they came. I have run down every record which I could find and all records indicate to me that they came with the first settlers from Europe. It is highly desirable, however, to bring to light all evidence which serves to settle the question with authority.

—ABJ—

The earliest record that I find of bees in the region where Wilder lives is the statement of Ramon de la Sagra that bees were taken from Florida to Cuba in 1764 and of Bartram that bees were imported into Pensacola by the English in 1763. He assumed that bees were brought to St. Augustine at a very early date by the Spaniards who founded the city.

The earliest record of bees that I find in New England is of a case in a court of law in Salem, in 1641, when suit was brought to determine ownership of a swarm which escaped and took up residence in a hollow tree.

In the Old World bees seem to have been closely associated with mankind since the dawn of earliest recorded history. References to bees and honey in the Bible are frequent as they are in other ancient writings. Quite naturally bees would be brought with settlers coming to establish homes in the new world. If any honeybees were present in America prior to its discovery by Columbus proof of the fact is lacking. This magazine is always glad to have such letters as Wilder's and appreciates his effort to bring out the truth.

—ABJ—

E. R. Root sends some interesting notes regarding the early importation of Italian bees. He recalls the fact that because the drones were dark that Charles Dadant was accused of selling common hybrids for imported bees. A. I. Root came to his defense in Gleanings and explained the typical markings of Italians saying that Dadant had sent out typically pure stock and calling attention to the fact that had there been intention to defraud it would be easy to send out bright colored bees.

—ABJ—

The pioneer queen breeders had everything but a happy time. The present efficient methods of handling had not yet been perfected and too many beekeepers were bunglers when it came to introducing the new stock, Too often the beekeeper lost his queen by poor handling. When the bees reared a new one from their own stock the beekeeper thought that he was defrauded when the fault was his own.

—ABJ—

Dr. E. F. Phillips places a high estimate on the service of Dr. C. C. Miller to the beekeeping industry. He says: "He has it to his everlasting credit that he invented no equipment, except a few minor things to which somebody else attached his name. On the contrary he was the person, more than anybody else, who led the development of management in his day."

—ABJ—

Dr. Miller was the most popular figure in beekeeping in his later years and few if any had so great a following among the readers of the bee magazines. Fortunately his advice was usually good and his followers were not misled into bad practice as was the case with some other popular leaders of that period.

Miller was always unassuming and could say without hesitation that he did not know the answer when some doubtful question was raised. His "Fifty Years Among the Bees" is at the same time a popular autobiography and a text book on comb honey production.

—ABJ—

Letters still come asking where seed of the yellow flowered Semipalatinsk alfalfa can be obtained. Mrs. C. W. Kruse, of Lemmon, South Dakota, is the only one in the United States offering this seed of whom we know.

—ABJ—

Speaking of celluloid combs, Wm. L. Carruthers of West Los Angeles, California, tells of having tried for four years to get the bees to store honey in celluloid sections with foundation. Since only one section was filled he decided that the bees were repelled by the odor of the material. This would indicate but little success for celluloid combs. No one has yet found a suitable substitute for beeswax for use within the hive

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We want to send a copy of our new circular to every package bee and queen buyer in the U. S. A. and Canada.

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For working your '38 cappings and wax into Busy Bee Brand non-sag foundation. 3 lb. white honey in new tins per pound of wax worked and packed in 25 lb. cartons. F. O. B. our station. One 60 lb. tin white honey for 3 lb. Italian bees with queen F. O. B. Sylvester, Ga. April 1939 delivery.

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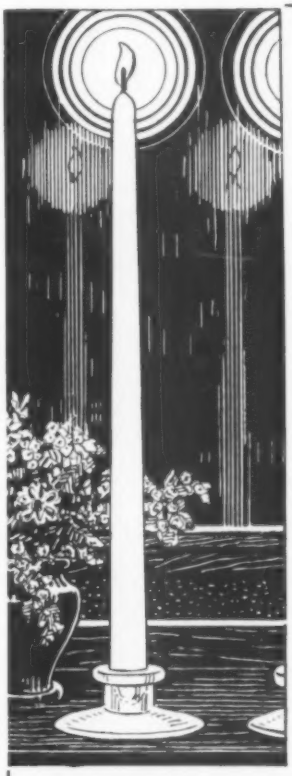
West Elkton, Ohio



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Two sizes, 14 and 17 inches, only 65c and 75 cents per pair postpaid. A lovely gift for anyone.

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